THE

CONTRACT JOURNAL

INCORPORATING

THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

No. 4,207 81st YEAR

THURSDAY, FEBRUARY 11, 1960

PRICE 2/-

EUCLIDS move the earth



BLACKWOOD HODGE

Subsidiary Companies Branches Works and Agencies throughout the World



"Multiple Sitework"

Rush and Tompkins Ltd., use one Michigan tractor shovel for site to site mobility

THE PROBLEM

Separated by eight miles of busy London streets, two London County Council housing sites are being developed by Rush and Tompkins Limited, one of Britain's major Building Contractors. A general purpose earth moving machine, able to travel under its own power from site to site, was required for clearing and levelling. But, since these jobs did not together add up to a full time assignment, the machine would be used for carrying, loading and stockpiling.

This was the problem facing Mr. Jack Lund, their Plant Manager—to find a Tractor Shovel with good road travel characteristics, with ample horsepower and tractive ability, to work well in wet London clay, and with sufficient versatility to ensure its full-time employment.

THE ANSWER

Mr. Lund decided to put various makes of crawler and rubber tyred shovels on trial and then ordered a Michigan 85A. "Because of the heavy wet ground conditions", he said, "we had assumed we should need a crawler, but were willing to try a Michigan, as it could get from one site to the other quickly".

"The Michigan's performance on trial, however, convinced us that not only could it travel faster, but could handle more than any other machine of comparable horsepower, and it could work efficiently in the congested area of the building operations".

HOW THE MICHIGAN WORKS FOR RUSH AND TOMPKINS LTD.

Twice each week the machine moves from Sydenham Hill Estate to Wandsworth. The eight miles journey takes thirty minutes, and the Michigan arrives ready for work.

Clearing and levelling the heavy clay is the Michigan's primary job. The special power train shows up well in these conditions. Torque build up in the convertor automatically matches the draw-bar requirements—this means more "push" when the

"going is tough". The blade edge is forced through the top layers of muck and the full bucket load is dumped at the end of the run. On the return journey the back edge of the blade levels the ground behind the high flotation tyres leaving a smooth compacted surface. The machine is working throughout the cycle, forward and reverse.

MORE JOBS HANDLED - BETTER

The 85A is too useful to be left idle between clearing operations whether it is loading out lorries with rubble, carrying and stacking, or towing, it is always on call. Always ready for an emergency, its capacity for salvaging other vehicles, emphasises its unique adaptability.

The operator likes the way it handles—he finds he can work right through his shift at top efficiency. The power controls and smooth easy movement cut out the fatigue he has been used to on bone shaking crawlers. He likes the way the Michigan goes right

into the load and comes out with a full bucket every time without jolting.

He can see where he's going and he can get into—and out of—tight corners, to work where normally manual labour would have been employed. The feel of finger tip power and versatility makes him the most useful member of the team, and he is proud of his capacity to speed the job along.

A GOOD CLEAN JOB

Rush and Tompkins Ltd. note how well the Michigan leaves the site, there is no churned up ground to make good, no broken drains, kerbstones or manhole covers, and since much of the work entails travelling on the Public Highways, this is "money in the bank".

At these two building sites, the Michigan 85A has proved to be the ideal all-round handling tool, and has shown it can work long and well in all sorts of ground conditions.





Write for full series of Job Stories to:

MICHIGAN (GREAT BRITAIN) LTD

Sales and Service - YORKTOWN, P.O. Box No. 3, CAMBERLEY, SURREY

Telephone: Camberley 3421/36.

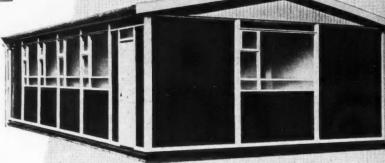
London Office - 3-5 CHARLES II STREET, LONDON, S.W.I Telephone: Trafalgar 1072

SCOTTISH LAND DEVELOPMENT CORPORATION LTD., 72 Dykehead Street, Queenslie, Glasgow E.3.
Telephone: Glasgow Shettleston 3546.

HARDUNS



PORTABLE TIMBER BUILDINGS





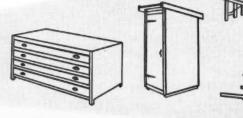
HARDUN'S specialise in a range of Portable Buildings from Foremens Site Cabins, which can be obtained from stock, to large modern Offices constructed from Western Red Cedar or Resin Bonded Plywood, as illustrated.

MOBILE SITE OFFICES



HARDUN'S Mobile Site Offices are specially designed for Public Works Contractors and can be fitted with desks, Plan Chests and provided with heating and lighting or can be fitted out for sleeping accommodation.

ANCILLARY EQUIPMENT



SEND FOR FULLY DESCRIPTIVE BROCHURE

HARDUN & SONS LTD.

HORTON ROAD WEST DRAYTON MIDDLESEX TEL WEST DRAYTON 3088-9 & 3761-2



Road Work is RAPID Work when BROOMWADE provides the power

On road work in Central London a "BROOMWADE" WR210 Portable, Rotary Air Compressor, delivering 210 c.f.m. at 100 lb. sq. in., is supplying the air power to four "BROOMWADE" type RB770B Road Breakers. These Breakers are powerful, hard-hitting tools and, in combination with the WR210 Compressor, speedily and efficiently break-up the road surface at low cost.

The range of Rotary Compressors includes machines with outputs from 120—630 c.f.m. They give maximum compression, higher volumetric efficiency, are provided with ample horsepower, have longer life, lower maintenance costs and are smaller in size and lighter in weight.

For full details of Rotary Compressors and Pneumatic Tools, write for Publications Nos. 333 R.C.E. and 401 T.E. respectively.

``Broomwade''

AIR COMPRESSORS & PNEUMATIC TOOLS

Your Best Investment

BROOM & WADE LTD., P.O. BOX No. 7, HIGH WYCOMBE, ENGLAND

Telephone: High Wycombe 1630 (10 lines)

Telegrams: "Broom" High Wycombe (Telex)

498 SA



GENERATING SETS

Sets ranging from 500 Watts up to 7½ KVA as standard, single or three phase. Larger sets against order.



For Lighting and Hand Tools such as Hammers and Breakers, Saws, Drills, Planers, Sanders, etc.





Petrol or Diesel - Mobile or Static Chasis.

Sets of 3 KVA capacity and above can be supplied with special welding transformers.

132-135 SLOANE STREET, S.W.I. TELEPHONE: SLOANE 9976 (5 lines) SCOTLAND: 39 CAVENDISH STREET, GLASGOW, C.S. TELEPHONE: SOUTH 0186 STRANGFORD, LTD., Belfast and Dublia, A. GUNN AND CO., Altrincham, Cheshira, A. GUNN AND CO., Altrincham, Cheshira, C. LEWIS (MACLEH NERY), LTD., Burslem, Stoke-on-Trent, G. B. CORNER AND SONS, Leeds and Nottingham.
JOHN ROULLSTONE, LTD., Newcastle upon

yne. R. SELWOOD, Chandler's Ford, Hants.



HYDRAULIC

... and, of course, all the usual star features:-

NO WIRE ROPES, CLUTCH, BRAKE, ROPE DRUMS.

HOPPER RAISED AND LOWERED HYDRAULICALLY.

SMOOTH AS SILK IN ACTION.

ABSOLUTELY FOOLPROOF LOADER OPERATION.

60° LOADING HOPPER ENSURES COMPLETE DISCHARGE.

PATENTED 'INVARAC' WATER TANK.

HIRE PURCHASE TERMS—ONLY 10% DEPOSIT

THE LINER CONCRETE MACHINERY CO. LTD.

328, PARK ROAD, GATESHEAD, 8.

Tel: 72501 (7 lines) Grams: "Liner, Gateshe

on Office & Showrooms: Liner House, Lexden Road, Acton, W.3. Phone: ACOrn 8931

Also at Birmingham

Manchooser · Liverpool · Bristol · Plymouth · Leeds · Nottingham · Glasgow · Dundee · Belfest,

Please send full details of items marked 'X'

O HYDRAULIC NON-TILT MIXERS O ROLPANIT MIXERS

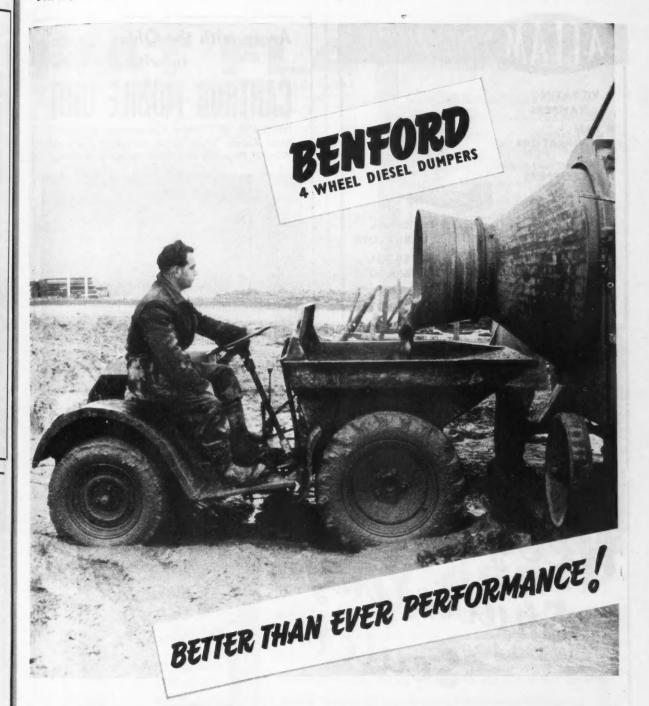
O HOPPER FED T.D. MIXERS O HAND FED T.D. MIXERS

O CUMPLOW MIXER

O PORTASAW O ROUGHRIDER DUMPER

O SLAB BLOCK & BRICK MACHINE

ADDRESS



IMPROVED TRACTION & WEIGHT DISTRIBUTION ON ALL MODELS!

Benford Dumpers are now better than ever before — yet cost no more! Improved traction and weight distribution on all models have given them a better than ever performance.

For full details please write for our new catalogue and price list No. 5916 15 ewt. capacity — MARK 3 Water level 12 cu.ft. Struck level 15½ cu.ft. Heaped 18 cu. ft. Skip loading height 39°.

22½ cwt. capacity — MARK 7 Water level 18 cu.ft. Struck level 22½ cu.ft. Heaped 27 cu. ft. Skip loading height 41".

30 cwt. capacity — MARK12/30 Water level 24 cu.ft. Struck level 27 cu. ft. Heaped 36 cu. ft. Skip loading height 44".

£330 Cash £33 down and 12 equal monthly payments of £24.4.9

£459 Price £46 down and 12 equal monthly payments of £36.9.8

£615 Price £62 down and 12 equal monthly payments of £48.17.0

DELIVERY FROM STOCK-CARRIAGE PAID IN ENGLAND AND WALES

BENFORD LTD.



REVERSING DRUM MIXERS

THE CAPE





WARWICK • Telephone : WARWICK 1170

TILTING DRUM MIXERS







SUPPLEMENT

- VIBRATING
 TAMPERS
- PAN
 VIBRATORS
- BAR CROPPERS
- ROTARY FLOATS
- . LIFT & FORCE PUMPS





HIRE WITH OPTION TO PURCHASE

ALLAM MACHINERY HIRE LTD.

132-135 SLOANE STREET, S.W.1 Telephone: SLOane 9976 (5 lines)
SCOTLAND: 39 Cavendish Street, Glasgow, C.5 Telephone: South 0184

Away with the Old, in with the New CARTRUK MORILE UNIT

fitted with all Modern Conveniences, including Flush Toilets, Wash Basins with Hot and Cold Water. (Supplied with Elsan Toilets-if required.)



Write for further particulars to :-

CARTRUK LIMITED,

Marsland Street, Portwood, STOCKPORT

or Phone 5227/8.

Neogene Shuttering Shuttering Sealer

*Neogene Shuttering Sealer is a Superior quality Lacquer developed for the treatment of new Shuttering. IT IS A DEFINITE MONEY SAVER, for Shuttering coated with Neogene Sealer increases the number of times a mould can be used. It is very economical, highly effective on timber and is recommended for use on shuttering quality chipboard. The Sealer is being used extensively by a considerable number of well-known Contractors.

* Post this coupon

NEOGENE PRODUCTS

CARLTON BRIDGE WORKS,
GREAT WESTERN RD., LONDON, W.9.

Telephone: BAYSWATER 6425



Please send full particulars

For the attention of

Company.....

Address

| Neogene Products, Carlton Bridge Works, | Great Western Road, London, W.9.

SSCJ

OF THE FUT



Distributors for . . .

The JCB Hydra-Digga/Loadall 65 . Bray Hydraulic Crawler and Wheeled Loading Shovels . Shawnee-Poole • Track Marshall Rear Dumps Angledozers · Walker-Doe Ditcher · Thwaites Dumpers . County Angledozers · Fordson Power Major and Dexta Tractors · Doe-Murex Welders · Parker Concrete Mixers · Holman Compressors • Rotary Hoe Trenchers • Petter Engines · Arps Trenchers · Robot Earth Borers . Fiat Crawler

ULTING MALDON ESSEX Tel: Hatfield Peverel 311 (Night 319)

Everyone knows you can get it at Doe's

EARTH BORER

Bores 9", 12" and 18" dia. to a depth of 12 ft., for telegraph poles, lamp standards, post hole digging and SHORT BORE PILING. Made specially to fit the Fordson Power Major 3point linkage. Price £575 ex Works.



BRAY 450T

Now . . . the Bray Loader with the Ford 6-cylinder diesel engine. More power than ever before. 15 cu. yd. rated capacity bucket. Heavy duty double acting rams. Will dig from the solid easily, cushioned against shock by the torque converter. The BRAY 450 T.F. is the operators' 'dream' come true. Let us prove it by demonstration.





The hire service

that never lets

you down



For metal surfaces it pays to choose the right bituminous paint

EXPERIENCED TECHNOLOGISTS KNOW that for painting metal surfaces they must choose a bituminous paint that is strongly adherent, non-absorbent, and constant in quality. That is why so many firms insist on Presomet.

Because it is absolutely constant, Presomet cannot allow damp to seep through and cause harmful rust. Presomet will not crack, bubble or blister. It can be applied very easily even by unskilled labour and it gives wonderful coverage, forming a fine, glossy black surface that is resistant to wear and rough usage.

Presomet is manufactured by the National Coal Board, at prices well below the average.

Presomet

MANUFACTURED BY THE NATIONAL COAL BOARD

Three grades of Presomet to meet your exact requirements

Presomet is supplied in three specific grades—light, medium and heavy. There is a Presomet to meet the *exact* requirements of the job you have in hand.

FREE TECHNICAL ADVICE

The National Coal Board will be glad to give technical advice and information on the best way to use Presomet. Write to: National Provincial Bank Buildings, Docks, Cardiff.

"Presomet" is a Registered Trade Mark



This client wanted a club-house building erected at very short notice. THORNS were able to match his requirements closely from their range of standard designs.

Manufacture began at once from existing drawings. By the time the site was ready, an erection team was on hand with the prefabricated sections. Plumbing and electrical services were co-ordinated with the structural work.

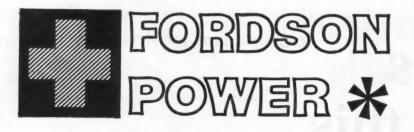
In less than two months from the receipt of the order, the building was in use.

The approximate price is available to bona fide enquirers.

THORNS

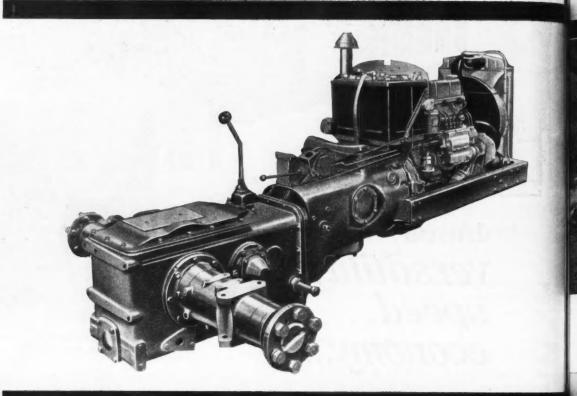
THORNS' prefabricated buildings, as used at Hart's Holiday Club, are available in basic widths of 10', 12', 15', 20', 25', 30' & 40', in any length, and in traditional or modern designs. THORNS will undertake the complete job, including all sitework; or will erect buildings on a prepared site; or, if desired, will supply the buildings for erection by the client's own labour, with or without THORNS' supervision. Catalogue of designs and prices on request. Ask THORNS to quote on your job.

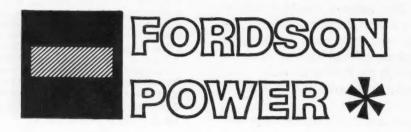
J. THORN & SONS LTD., (Dept. 73) BRAMPTON ROAD, BEXLEYHEATH, KENT.



INCREASES YOUR OUTPUT

You'll have more power to p your work ahead when your en ment is based on Fordson a Test figures show it; world-wide perience in the toughest condin has proved it. Insist on Ford Power whenever you're buy equipment. It's your sure way faster, more effective work cycles increased, more profitable out





REDUCES YOUR COSTS

You begin saving from the day buy Fordson-powered equipmed Ford's quality, volume production the great Dagenham Works cuts capital outlay. Fordson Power is the lowest cost diesel power the world and keeps your run costs down to a minimum. Ford design gives you simple, lower maintenance backed by a will will be saved by a will be saved



FORDSON POWER *

IVIDES YOUR HOLD-UPS

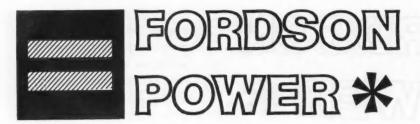
When your equipment is Fordson-powered you can work round the clock in the toughest conditions, confident that your plant has the robust reliability to take punishing tasks in its stride, without hold-ups and idle time. Manufacturers have recognised this, and so you have a bigger choice of better equipment based on Fordson power than on any other unit.



Chaseside Loadmaster







SUPPLEMENT

SOLVES YOUR SITE PROBLEMS

Solve your problems of mataining high outputs by use only equipment harnessed to liable Fordson Power. The way you are insuring againschedule-breaking hold-upensuring maximum production all operations. More equipment is made with Fordson Power than any other—you'n a wonderful range to choose from. And when its got Fordson Power you know it's good.

MU



Muir Hill Dumper

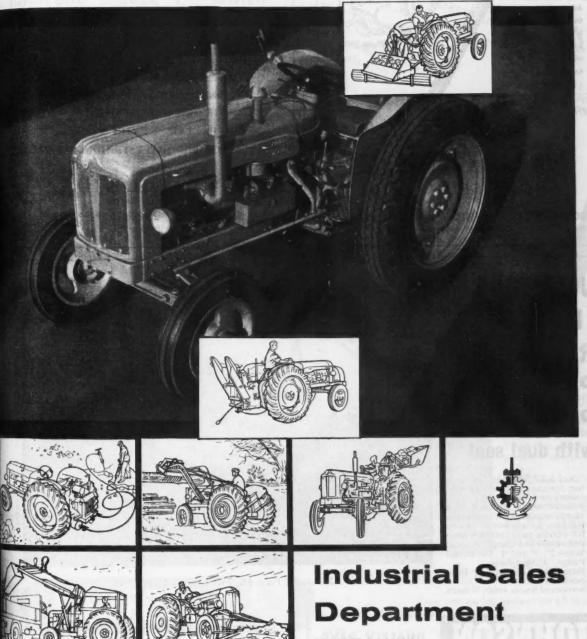
J.C.B. Hydra-Digger/Loadall 65





You don't know the meaning of versatility in mechanical equipment until you have checked up on all the jobs a Fordson Power Major tractor can be equipped to do—and which it will do exceptionally well. There's more specialised equipment made for it than any other tractor. For details of cost-saving Fordson tractors, suitable equipment, and Fordson industrial power units, write to us today.

MULTIPLIES VERSATILITY

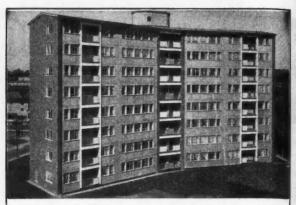




SUPPLEMENT

anda ENGINEERING

MICKLEY WORKS, DRONFIELD WOODHOUSE, SHEFFIELD Telephone: SHEFFIELD 72583 Telegrams: "UPSET," SHEFFIELD



Contractors: Messrs, Wates Ltd. Flats on Wychall Farm Estate, Birmingham, City Architect: A. G. Sheppard Fidler Esq., M.A., B.Arch., F.R.I.B.A., A.M.T.P.I.

METALWORK

for the Building and Civil Engineering Industries

BALUSTRADES RAILINGS FIRE ESCAPES SPIRALS SPECIAL STAIRCASES BRIDGE BALUSTRADING

BIGWOOD BROS.

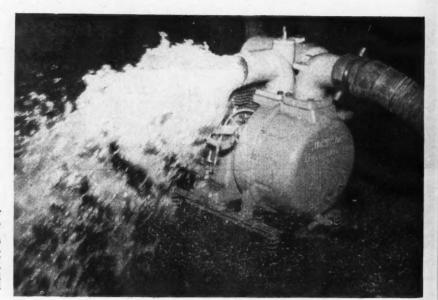
(BIRMINGHAM) LIMITED

WOODFIELD ROAD . BALSALL HEATH . BIRMINGHAM, 12 Established 1879 Phone: CALthorpe 2641/2 London Offices: 68 VICTORIA STREET, LONDON, S.W.1

JOHNSON 'FASPRIME' RAPID **PRIMING** PUMPS with dual seal

- ★ 'Dual Seal' proved by 1,000 hour test continuously handling 43% sharp sand in suspension ★ Fastest Priming. Highest Suction ★ Handle seepage at low engine revs.

- ★ Adequate horse-power for the duty
 ★ All wearing parts corrosion-resistant—easily and cheaply replaced
 ★ Sizes—2", 3" and 4" Centrifugal Pumps. 3" Mud Pump.
 ★ Petrol, Diesel, Electric or Independent Drive
 ★ Service and Spares within 24 hours



3" Portable Pump Mk 9A. Capacity 10,000 GPH

QUALITY PAYS

C. H. JOHNSON (Machinery) LIMITED STOCKPORT CHESHIRE

Telephone: STOckport 2642/5. Telex 66-297.

Telegrams: 'Machinery' Stockport.

FOR DUMPERS MUD PUMPS CENTRIFUGAL PUMPS POWER RAMMERS POKER VIBRATORS SCREED VIBRATORS FIXED AND MOBILE CONVEYORS SOLE U.K. DISTRIBUTORS FOR A.B.G. ROADMAKING MACHINERY Scottish Sales and Service Depot: 55 Arrowsmith Avenue, Glasgow W.J. Tel: Scotstoun 6933. London Sales and Service Depot: 38/44 Lower Richmond Road, S.W. 14. Tel: PROspect 7671.

i

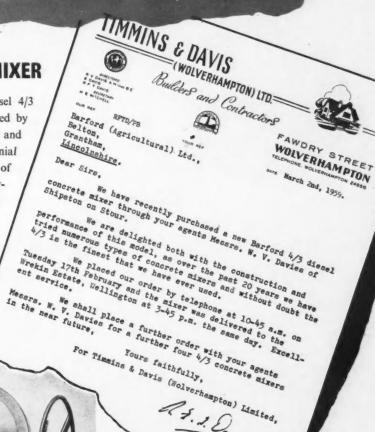
the 4 3 is the finest concrete mixer we have ever used... writes Mr. R. F. T. Davis—Director of a long-established firm of builders

BARFORD DIESEL 4/3 MIXER

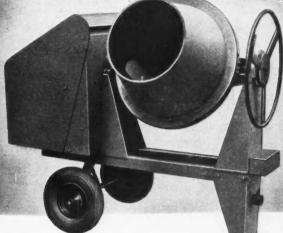
Since its recent introduction, the new Diesel 4/3 Barford Concrete Mixer has been acclaimed by users everywhere for its low running costs and high standard of performance. The testimonial letter reproduced here is genuine evidence of the advantages you stand to gain by employing this economical and hard-working machine.

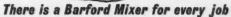
the FIRST EVER DIESEL 4/3 cuts running costs by over half!

Engine: 1½ h.p. Diesel Lister L.D. or Petter PAZ MK. V. Capacity: One batch: 4 cu. ft. in, 3 cu. ft. out. Output per 8 hour day — 20 cu. yards (approx.)



Director.







We offer a comprehensive range from 4/3 to 10/7 of the Tilting type, and from 7/5 of the Non-Tilting type.

PRICES:

4/3 Diesel (with pneumatic tyred wheels) £145 delivered 4/3 Petrol (with pneumatic tyred wheels) £92 delivered 5/3½ Prices on application

BARFORD

BARFORD MIXERS Manufactured by

BARFORD (AGRICULTURAL) LTD., BELTON · GRANTHAM · LINCOLNSHIRE

Please	send	me	full	details	of	the	4/3	Mixer
--------	------	----	------	---------	----	-----	-----	-------

NAME

ADDRESS....

PUMP USERS SAVE MONEY

DOLPHIN floating suction strainers avoid both dirt and sand from the bottom and rubbish floating on the surface. For pumping from mines, excavations, ponds and streams, they save

wear of pumps and costly stoppages. Even if stranded in shallow water, they do not get buried, and continue to give the greatest possible protection to the pumps.

Made entirely from tough and shock-proof plastics and stainless steel, the float chamber filled with a moulding of plastic foam, DOLPHIN strainers are practically incorrodible and cannot lose their buoyancy.

Please write for booklet which gives full details of DOLPHIN Floating Strainers.

DOLPHIN FLOATING STRAINERS

Save their cost many times over

MEGATOR PUMPS & COMPRESSORS LTD 43 BERKELEY SQUARE · LONDON W1 · Tel: GROSvenor 6946

TGA MII4D

WHITLOCK

DINKUM DIGGER

MAJOR

The WHITLOCK DINKUM DIGGER MAJOR is RIGHT for all excavation work requiring high output at low cost whether it be in the street, on factory or building site, as also on cleaning ditches, canals or waterways and for grab work

** Buckets—12° to 54° in width. Hydraulic Power Grab, Forward Shovel and Other Attachments

Main Distributors

SYMES
(PLANT SALES) LTD
ONGAR ROAD, BRENTWOOD

ESSEX Telephone: BRENTWOOD 2118

DEMONSTRATIONS
HIRE PURCHASE
PART EXCHANGES

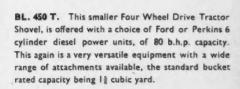
NOW! The latest addition to the Bray range of tractor shovels

the BL 460 T—110 BHP— 2½ cu. yd. BUCKET

Bigger, faster and more powerful, the BL 460 T has been designed to tackle the roughest, toughest jobs under the roughest, toughest conditions—dig, doze, carry or load, the BL 460 T gives you peak performance right round the clock. British-built, with British performance figures, the BL 460 T incorporates the latest technical developments.

Write for further details to:

BRAY CONSTRUCTIO





BL. 430. A Four Wheel Drive Loading Shovel with planetary hub reduction unit and a $l\frac{1}{2}$ cubic yard rated capacity bucket as standard. Powered by Ford Diesel 4 cylinder engine with a 52 b.h.p. capacity. With conventional front wheel steering. A very useful equipment which can be fitted with any of the quickly interchangeable attachments.

BUCKETS available up to 5 cu. yds.

LIFTING CAPACITY 12,000 lbs.

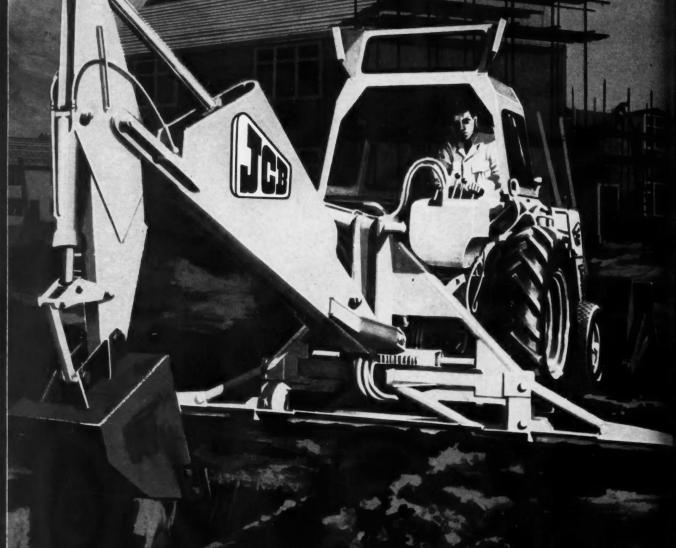
EQUIPMENT LTD.

(One of the Slicephridge Engineering FAGGS FOAD • FELTHAM • № 2012 Phone: Faltham 3471 • Grand FACCO

AL THE CONTRACT JOURNAL 11/2/60 SUPPLEMENT



HYDRA-DIGGA/LOADALL 65





SALES & SERVICE

J. A. STEWART (PLANT) LTD MILNBANK WORKS TOWNMILL ROAD GLASGOW E.I. C. BRIDGETON 4441

A. GUNN & CO LTD ATLANTIC STREET WORKS BROADHEATH ALTRINCHAM CHESHIRE C 2747

BRISTOL PLANT HIRE LTD BATH ROAD BRISTOL 4 C 77468



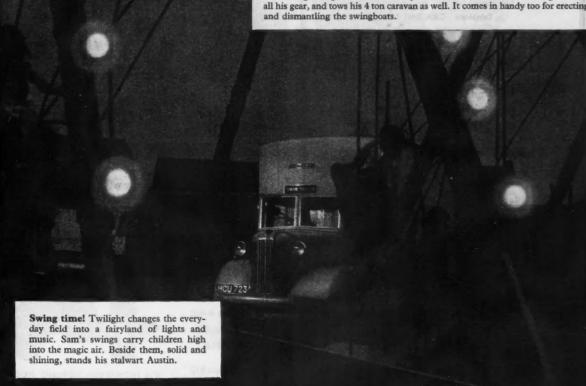


ELEPHANT MEADS

What you gain on the swings...



The fair goes up. Sam Smith's 10-year-old Austin 2 tonner carries a generator, all his gear, and tows his 4 ton caravan as well. It comes in handy too for erecting



PAINTED WAGONS roll along the summer roads of Britain. The fun of the fair is on the move. Loaded convoys are bringing bustling blaring life to surprised meadows. For a day, two days, merry-go-rounds and dodgem cars whizz among the daisies. Then, quickly as they came, stalls and shies, caravans, dogs and people vanish. And are off on the road again.

The small world of Smiths

Among those who live their life on wheels are the Smiths. A big family who travel together from Birmingham to Gloucester, from Hereford to Oxford, from Easter to October. Sam Smith, his wife and 14-yearold son are part of that small world.

On the fairground Sam runs 6 swingboats and 8 slot machines. On the road he drives a lorry with the family's 4 ton caravan in tow, and all the swingboat gear, slot machines and a small generator on board. The lorry is no ordinary vehicle, as Sam will proudly tell you. "It's the best motor was ever made. That motor will go forever and a day". The motor is a 1949 Austin 2 tonner.

Sam's remarkable veteran

Before Sam Smith bought it, his Austin worked hard for the General Electric Co. Ltd., Birmingham. "I've had it 4 years now and I haven't spent a bean on it. She stands out all winter too and when it's time to go I push the button and we're off. Never have to use the handle."

What does Mrs. Smith say? "The lorry? It's a real good one. Yesterday it flew up that hill by Camden-never even got warm. It was lovely!"

"Never bother me, hills don't," Sam agrees. "The lorry just keeps pulling all the way. It's a pleasure to go anywhere, I wouldn't swop it for anything". He should know-he's been driving for 25 years now.

What about petrol consumption? "25 m.p.g. empty, 15 m.p.g. loaded." Look sceptical and he'll say, "I ain't kidding. It's definitely been a good lorry. It's done its job and done it well". What Sam Smith makes on the swings he doesn't lose on the roundabout with Austin!

The veterans of the future will be found in the present Austin range-widest commercial range in Britain today. 1 to 2 ton vans, 2 to 7 ton trucks - tippers, prime movers, chassis units for any type of bodywork. LWB or SWB. N.C. or F.C. Petrol or diesel. All with 12 months' warranty and backed by B.M.C. Service—Britain's best service and parts organisation.



THE AUSTIN MOTOR COMPANY LIMITED, LONGBRIDGE . BIRMINGHAM

SURFACING

FOUNDATION CONSTRUCTION

ASPHALT SURFACING TO B.S.S.
BITUMINOUS MACADAM
TARRED MACADAM
TARSPRAYING, ETC.
MASTIC ASPHALTS

ROADS - DRIVES - CAR PARKS

WAYWARDEN

LARKSWOOD 5451-2



ELEPHANT HEADS and TRUNKING

ELEPHANT HEADS:

Standard Head 10 cu. ft. capacity. Made in various sizes and designs to suit capacity, position of receiving and discharge.

ing and discharge.

Hopper is transformed over length from square to round to ensure smooth flow of mix and at high discharging rate with no fouling.

Trunking to suit customers requirements:

The finest on the market today - and the keenest prices in the field.

Full details from the octual Manufacturer AUDAX

CENTRAL AVENUE, WEST MOLESEY, SURREY Telephone: Molesey 6071 (5 lines)



Telephone GRA 3401-8

ARTHUR FOSTER [EAST HAM] LTD. STEVENAGE ROAD, EAST HAM, E.6

FOR HIRE-ERECTION
PLANT AND TACKLE TO
LIFT UP 100 TONS



MULTIPLE GARAGES!

Lower-coat car housing with meses economical use of expensive ground space. That's the keypote of Alberough Multiple Garages, which eliminate single-tarage end-walls, saws agrace and reduce both materials and labour-costs. Of obsains, uniform appearance and sound weatherproof construction, Alborough Multiples are built to last and give years of pro-ective service. They're your beat buy in 'block' garaging.

Have details sent you — Write or Phone

Have details sent you — Write or Phone

A.B.C.D. (RAYNES PARK) LTD.

34/35 ALPHA ROAD, SURBITON, SURREY.

Tel. ELMbridge 6591/3



" MACO"
Pipe-Laying
WINCH

to 2 TON CAP.

All-steel, light, portable and efficient

> Write for Catalogue

MAXIMIXAM CONCRETE MIXERS

> TRAILER AND STANDARD MODELS

7/5-5/31-3/2

Diesel, Petrol and T.V.O.



5/3} HIGH-SPEED TOWING MODEL

PETROL £176.0.0 DELIVERED

ENGINEERING LTD. 457 FINCHLEY ROAD, LONDON, N.W.3

SCOTNEY MADE
TIMBER BUILDINGS
ARE BRITAIN'S BEST

Office Block for Messrs. Fisons Pest Control Ltd. Scotney made timber buildings are Britain's best in design, construction and appearance.

We at Scotney's do not look upon a timber building, whatever its requirement, as just another temporary affair to fill a gap before a permanent building is erected.

All our buildings are architect designed not only to fit in with local surroundings, but to be functional. Though we do supply many for temporary use, today you can see throughout the country many permanent Scotney buildings, for offices, shops, factories, schools, etc., that have been constructed by most up-to-date methods, incorporating the widest use of timber and other materials.

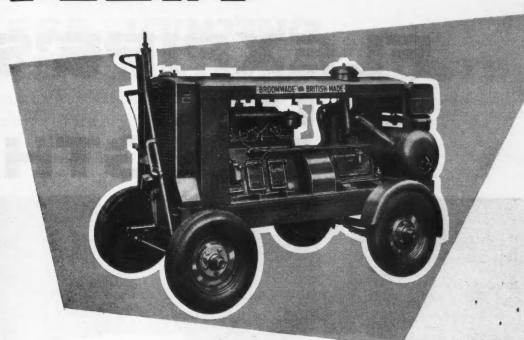
Scotney buildings can be erected quickly, saving much time and capital outlay.

You are invited to use the facilities offered by our special advisory department for imaginative timber construction in conjunction with modern materials.

TOM M. SCOTNEY LTD

BUILDING DIVISION, DESIGNERS, TIMBER ENGINEERS Dept. 124, ST. IVES, HUNTS. Telephone 2421 (4 lines)

POWER for SALE OF HIRE



* PORTABLE COMPRESSORS

* PORTABLE PUMPS

* PNEUMATIC TOOLS

You can BUY sound, modern equipment from the comprehensive stocks held at WARDS depots throughout the country or you can
HIRE this equipment on attractive terms against the needs of the moment. In either case you will find WARDS provide a thoroughly dependable service—full details of which will be



THOS. W. WARD LTD

Stand No. 55 at the Machine Tool Exhibition Olympia in June

ALBION WORKS
SHEFFIELD
Phone: 26311
Grams: FORWARD, SHEFFIELD

forwarded on application

BRETTENHAM HOUSE STRAND LONDON W.C.2 Phone: TEMPLE BAR 1515 GIANTS WHARF BRITON FERRY GLAM. Phone 3166

18/24 FORE STREET SCOTSTOUN GLASGOW Phone: SCOTSTOUN 8083

TI

T

FLEXPIPE'S EXTRA 2ft LENGTH



CUTS COSTS!



FLEXPIPE LIMITED, BOWATER HOUSE, KNIGHTSBRIDGE, LONDON, S.W.1 Tel: KNIghtsbridge 7070

LONGER LENGTHS CUT LAYING TIME Flexpipe—the

latest development in pitch-fibre piping—comes in 10 ft. lengths instead of 8 ft.

This means that any length of piping can be laid as much as 20% faster with

Flexpipe than with any other pitch-fibre pipe—an important saving in labour costs.

LESS JOINTING CUTS MATERIAL COSTS

This extra length also reduces the number of joints needed on any job—a valuable saving in jointing materials.

Flexpipe is available NOW in both 4" and 6" diameters—and costs no more than other pitch-fibre pipes.

AND REMEMBER FLEXPIPE HAS THESE OTHER ADVANTAGES...

(a) Much easier to transport, stack, and handle—one man can carry three or four Flexpipes at a time without any sense of strain. If he drops them—they're unbreakable! (b) No jointing compound required: Flexpipes are joined together with a collar that can be simply knocked on with a hammer and a block of wood. The joint is then completely sealed. (c) Flexpipe cannot crack under earth movements and is corrosion-proof. (d) It can be sawn to any length as easily as wood.

LIKE TO KNOW MORE?

Send for Flexpipe literature or let us put our representative in touch with you. Or both.

PITCH FIBRE PIPES

LEXPIPE LIMITED—NOW A MEMBER OF THE BOWATER ORGANISATION



AT YOUR SERVICE

DIVING SERVICES LTD. Experts in Marine Public Works. Also in Cutting Steel and Timber, Ship Repairs, Surveys, Blasting, Cylinder Sinking, Piers, Outfalls, etc.

Any underwater Work undertaken.

Glenmore · Sugden Road · Thames Ditton · Surrey

Telephone: EMBerbrook 2039

SCAFFOLDING & CONTRACTORS' PLANT FOR HIRE OR SALE

Also Huge SALES STOCKS of Tools, Equipment and Clothing for IMMEDIATE DELIVERY SOLE N.E. AGENTS FOR BENFORD CONCRETE
MIXERS & DIESEL DUMPERS

Literature on Request

H. B. RAYLOR & COMPANY LIMITED

YORK
Thomas Street Works, Hull Road
'Phone: 55661 (5 Lines) STOCKTON-ON-TEES Haverton Hill Road 'Phone: 65681 (2 Lines)





CLINKER

R Δ

В

Speciality: Washed and Graded Clinker Filter Media Largest Screening Plant in London, output 100,000 tons per annum

PALMER & SONS

Ferndale Works, Manorway, East Ham, E.6 DEPOTS AND WHARVES: BARKING, POPLAR AND KINGSTON-ON-THAMES

Ring Albert Dock 3464 (4 lines)

R Δ

&

HIRE

SOUTHALL 5601/2 & 3814 SOUTHAMPTON 48864



COMPRESSOR Portable Mobile EXCAVATORS TRACTORS TRACTOR SHOVELS DUMPERS MIXERA RAMMERS



SALES

Distributors BARFORD 75" & "150" **DUMPERS**

and full range of MIXERS

THE WESTERN HIRE CO. Ltd. CANAL YARD, HAYES ROAD, SOUTHALL, MIDDX

Automatic tipping is only ONE of the Loadmaster's advantages



HOISTS



A.C.E. MACHINERY LTD . BRIXTON . LONDON . S.W.2

Telephone: Brixton 3293 (9 lines) Telegrams: Auscon Telex London

and at Brentford, Middlesex



R. WHITE & SONS (Engineers) LTD., P.O. BOX 2, WIDNES, LANCS
Telegrams: "RAILS, WIDNES". Telephone: WIDNES 2425 (Three lines)

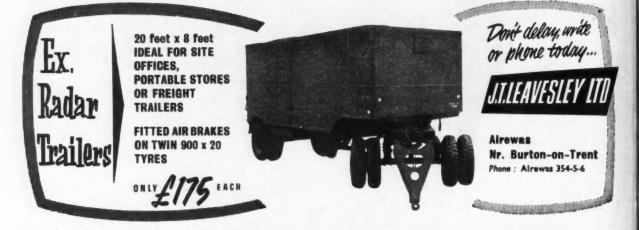
NEW HUTS at old prices

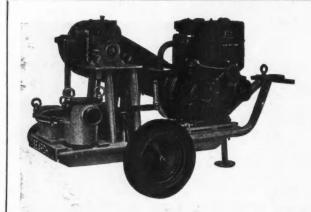
Huts of all popular sizes at very low prices, yet of unsurpassed quality, are now available for discerning contractors; these prices are made possible only because of the large quantity available for immediate use from stock. Woodwork is PLANED ALL ROUND to give a handsome appearance in addition to long service.

Buy at today's lowest prices. Far full details write or phone.

PANEL-LASTIC Construction Co., Ltd.

Belvedere Works, Feltham, Middlesex. FELtham 5761.





SEARCH MUD MARVEL

Lift and Force
3 in. DIAPHRAGM PUMP

Handles Water, Mud, Sludge, Sewage, Tannery and other industrial waste. Non-clogging ball valves; fully guarded V belt drive; Strong Tubular Frame. Lister petrol or diesel engine. Designed for continuous operation.

WILLIAM G. SEARCH LIMITED WHITEHALL RD. LEEDS 12 Tel: LEEDS 639081 (10 lines)

JOHNSTONS FOR PLANT HIRE



DROTT SKID SHOVELS EXCAVATORS VIBRATORY ROLLERS COMPRESSORS MOBILE CRANES

DUMPERS
PUMPS
MIXERS
WEIGHBATCHERS
DINKUM DIGGERS

Tel. SHEPHERDS BUSH 6941/3

J. J. JOHNSTON & COMPANY LTD., 271 Uxbridge Road, London, W.12

Designed

for the job!



SCAMMELL

The name that carries WEIGHT everywhere!

The great new range of Scammell Dump Trucks—with every model designed to stand the toughest conditions—offers capacities from 6 to 20 cubic yards.

Cripps are proud to be handling such outstanding machines and to back the famous Scammell name for dependability with their own for good service.

Write for details to:- R. Cripps & Co. Ltd.

SALES OFFICE: ABBEY BRIDGE, NOTTINGHAM.
Phone: Nottingham 71161 (5 lines) Grams: Criptracnottm Telex.

SERVICE & PARTS: TRIUMPH ROAD, NOTTINGHAM.
Phone: Nottingham 74235 (10 lines) Grams: Criptracnottm Telex.

TRUCKS

SOLE CONCESSIONAIRES
IN THE UNITED KINGDOM
FOR
SCAMMELL DUMP TRUCKS

CRIPPS

MANCHESTER DEPOT: ORDSALL LANE, SALFORD 5. Phone: Trafford Park 1658 (3 lines) Grams: Criptrac Man Tel

NORTH EASTERN DEPOT: SHILDON, CO. DURHAM. Phone: Shildon 261 (6 lines) Grams: Criptracshildon Telex.

MASSEY-FERGUSON BREAK

...with Britain's first completed "TRACTOR-DIGGER COMPANY OF THE C

Once again Massey-Ferguson lead the way. Once again Massey-Ferguson introduce the first unit of its kind to be built in Britain - the first wheeled Tractor-Digger-Shovel designed as a complete unit and built, powered and serviced by a single manufacturer. This new three-in-one rig has been developed and styled specially to meet the needs of builders, contractors, municipalities - in fact all industrial users who are looking for a low cost, highly mobile Digger-Shovel, with a faster working cycle than any comparable equipment. The new Massey-Ferguson Digger and Shovel are operated by the same built-in hydraulic system. They work as an integral self-propelled rig, perfectly matched for higher output, lower working costs, and easier operation. And Massey-Ferguson resources make it possible to market this superb quality equipment

Your local Massey-Ferguson Industrial Distributor is fully experienced in servicing the complete rig and would welcome the opportunity to come out and demonstrate it on your site. His address and full technical information will gladly be supplied on request.

at a really economical price.



Remarkable performance and simplicity – fastest digging cycle – 200° digging arc – can be offset to left or right – digs flush against walls, fences and other obstacles – attached or detached in less than five minutes. Full range of buckets available.

NEW! MASSEY-FERGUSON 702 INDUSTRIAL TRACTOR UNIT

Styled specifically for the industrial user with high torque Industrial Diesel engine - rugged, compact and manoeuvrable - power-assisted steering standard.

NEW! MASSEY-FERGUSON 702 SHOVEL

Tough, all-purpose Shovel built round tractor for greater strength, better visibility and ease of operation. Range of buckets and Angle-dozer, Fork Lift, Scarifier, Jib extension.

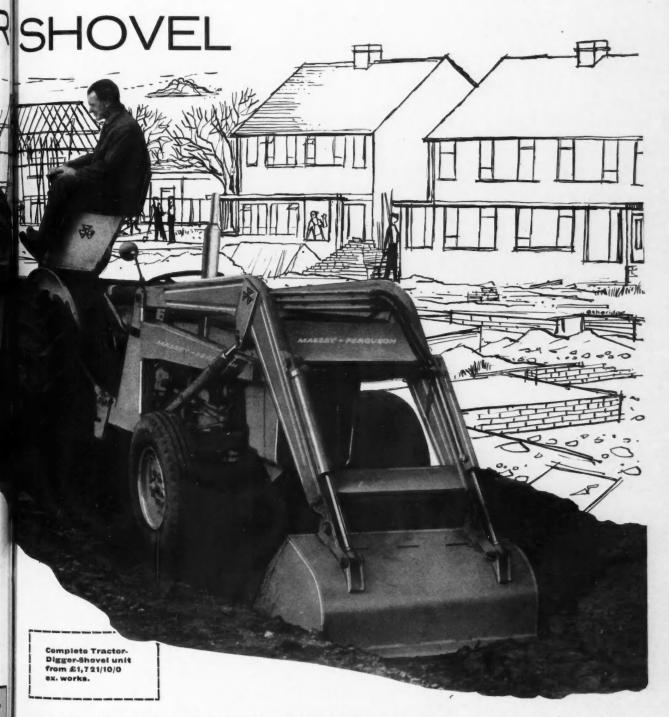


STANDARDISE WITH

MASSEY-FERGUSON

NEW GROUND

"Three-in-One"



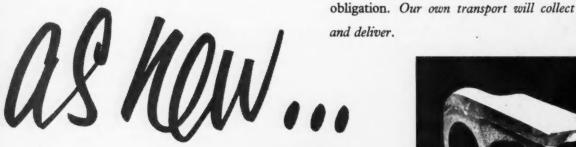
WORK-MATCHED EQUIPMENT FOR LOWER COSTS

AS AMOUNT

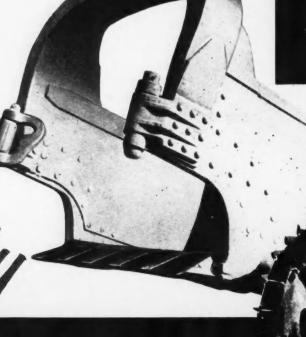
It's true Dilloway-reconditioned equipment is even bit as good as new and costs much less. By employment of skilled craftsmen with years of experience, and the use of the best quality materials obtainable, we offer the fine reconditioning service available anywhere. We handle ALL types of plant and equipment and shall be delighted to quote you entirely without

逐

to H. M. the Quest Agricultural Enginee

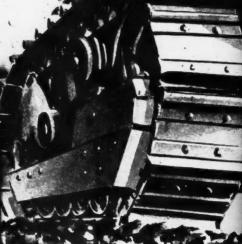












P. W. DILLOWAY LIMITED PECONIC

reconditioned

Head Office and Works: Southall, Middlesex. Tel: Southall 6511 Scottish Office and Works:

32 Burnfield Road, Giffnock, Glasgow
Tel: Giffnock 1125-6

West Country Office and Works:

Bishopsteignton Road, Teignmouth, Devon
Tel: Teignmouth 1325





SOO PINGON

The most comprehensive range of Tower Cranes available

Height of Lift presents no problem on a Pingon

All models suitable for Static, Climbing or Rail Mounted Duties.

> Backed by a Nation Wide After Sales Service

Our Technical Advisory Service is availabe for any Special application

Capacities up to
15 Tons.
Send for fully
illustrated catalogue

SOLE SELLING AGENTS IN THE UNITED KINGDOM

GEORGE COHEN

SON'S AND COMPANY LIMITED

WOOD LANE, LONDON, W.12 · Tel: Shepherds Bush 2070

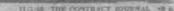


COLES SAVE MOTHERWELL BRIDGE AND ENGINEERING CO. LTD., A MINIMUM OF £880 IN ONE LIFTING OPERATION

Two Coles Diesel-Electric Cranes, working simultaneously, were used to lift this 18,000 gallon capacity Water Spheroid weighing almost 20 tons and position it accurately on three columns. As the road was closed during the operation, erection time was of the utmost importance and, although the time allocated was two days, the job was completed in HALF that time, thanks to the SPEED and PRECISION of Coles Cranes.

Acknowledgment to County News Photos, Motherwell





Coles give speed with pin-point precision



THE NAME THAT CARRIES WEIGHT

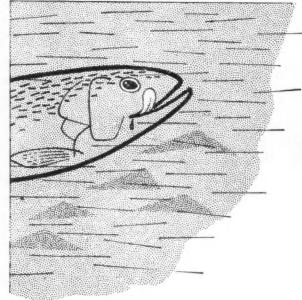
PEGISTERED TRADE MARK

The base of the Water Spheroid contained three holes designed to fit over locating pins in the columns; ONLY ½ CLEARANCE was allowed, yet the operation was accomplished with pin-point precision — an amazing demonstration of the accuracy and faultless reliability of Coles Diesel-Electric Cranes. This high speed, high efficiency operation was achieved at a

operation was achieved at a SAVING of £54 per ton, over any alternative method.

Get on to Coles and see how they can save your time and money.





...and

FONDU CONCRETE

achieves its object

Remember—for most purposes concrete made with CIMENT FONDU is ready for use 12 to 15 hours after placing, and at 24 HOURS it is stronger than other cements 90 DAYS old. Also, used with suitable aggregates, CIMENT FONDU produces Refractory and Insulating concretes of the very highest quality.

For Trench Reinstatements, Floor Repairs and Renewals, Steps, Sewerage and Drainage work, CIMENT FONDU is unequalled. Pipes jointed with CIMENT FONDU mortar can be smoke tested within a few hours of jointing.

Let us send you our 32-page Booklet "THE CEMENT FOR INDUSTRY".

The Cement for Industry

FOR SPEED · STRENGTH · RESISTANCE · REFRACTORINESS

LAFARGE ALUMINOUS CEMENT CO. LTD. 73 Brook Street, London, W.I. Tel: MAYfair 8546



4 P/97

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

NOTICE—Orders for advertising are accepted on the understanding that the Editor may make may sterations in an advertisement to ensure its conformity with the style and dismisured of reconstant countries of the style and dismisured of register of the style of the st

to eithhold those not in accordance with this rule.

FOR SALE.
300 Adjustable Steel SPLITHEADS, overhauled, with folding legs: No. 1, 22.6 each: No. 2, 25.6 each: No. 2, 25.6 each: No. 4, 32.6 each: No. 4, 32.6 each: No. 4, 32.6 each: No. 1, 25.6 each: No. 2, 25.3 fos. each: No. 1, 25.8 each: No. 2, 25.3 fos. each: No. 3, 25.17s, 60. each: No. 4, 24.15s, each. Also available: COLUMN CLAMPS, BEAM CLAMPS, PROPS. FOR SALE and HIRE.

PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

FOR SALE.
SECTIONAL TIMBER BUILDING, 86ft. long x 29ft. wide, 10ft. 6in. to the eaves, timber floor, timber roof.

SECTIONAL TIMBER BUILDING, 72ft. long x 39ft. wide, 9ft. to the eaves, asbestos roof, matchboard

SECTIONAL TIMBER BUILDING, 72ft. long x 39rt. wide, 9ft. to the eaves, asbestos roof, matchboard lined.

May be inspected by appointment where standing.

F. JAMES AND SONS,

Newport Pagnell (18 and 19), Bucks.

C. EVANS AND SONS, LTD., have available from stock over 250,000 SCAFFOLD COUPLERS, including Burton Little Glants, Norstel, Big Ben. SGB Boulton. M.A.C., Mills and No Bolts. Send for our detailed list.

Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

GREASE GUNS, heavy duty, 70% off list price. Tecalemit, 291-20. flexible tube, head, hand lever operated. Brand new condition, 60/each, six at 55/-, 20 at 48/-. Hydraulic head, 10/eatra. CROMWELL CO., Newport, Mon. 59045.

WANTED, 12/17ft. CROSSING TIMBERS. approx. 12(n. x 6in., also 3/5ft.—Details, price and location to: GEORGE COHEN, SONS AND CO. LTD., Contractors' Plant Depot. 600 Wood Lane, London, W.12. Tel.: Shepherds Bush 2070.

SISTERSON for SLEEPERS, all grades, CHAIRED SLEEPERS and CROSSING TIMBERS: also STELL RAILS, with Fittings. Stocks Midlands and North.—54 Grey St., Newcastle on Tyne. Tel. 22587.

WANTED, AIRCRAFT HANGERS, all types. Also ELEVATED WATER TANKS. Top prices paid.—Details to: A. G. CAMPBELL (ARCAM). LTD., Lower Broadheath, Worcester. Tel.: Hallow 361.

PODMORE WORKS

ALL BIRRS - PROMPT DESPATCH

PODMORE WORKS LIMITED 700 - FTB, GARRATT LANE, LOS

PHONES, WIMBLEDON 7623

TARPAULINS

NEW, GREEN, ROT-PROOFED, SEAMS DOUBLE-SEWN WITH BEST LINEN THREAD; REINFORCED BRASS EYELETS, SPLICED ROPES

1

EX-GOVERNMENT, 1001. x 7tt. . £1 5 0 1001. x 10tr. . £2 0 0 14tt. x 10tr. . £2 3 0 0 15tt. x 12tt. . £4 10 0 20tt. x 10tt. . £4 18 6 18tt. x 12tt. . £5 5 0

GENUINE EX-RAILWAYS.

HUTS

OFFICES STORES

S ITE GOODS.—RAILWAY SLEEPERS, sound, second-hand 1-50, 11/9 each; 51-100, 11/3 each; 100 and over, 10/9 each; 51-100, ex yard, 10/9.

Summerfeld TRACK rolls, 25vd. long x 10ft. wide, M.S. rods, 9ln. centres, £12 10s. per roll. TARPAULINS, second-hand, overhauled, ropes and eyelets: 18t. x 28t., £6; 18ft. x 15ft., £6 15s.: 24ft. x 15ft.

A. F. SIMPSON, LTD., 68/70 Penge Road, South Norwood, S.E.25. Telephone: Sydenham 3131 (3 lines).

Telephone: Sydenham 3131 (3 lines).

SCAFFOLDING, etc., for SALE
at LOW PRICES: EXCELLENT CONDITION.
OF DELECTED SEASON OF THE STATE OF

FOR SALE, SCAFFOLD BOARDS, NEW, cornered and bound, at £112 per standard, determined and rebound, first-class quality, lengths mainly 12tt. 14tt. and 15tt. 280 per standard, at 15tt. 280 per standard, at 15tt. 280 per standard, and 15tt. 280 per standard

Burnside Street, Bow, E.3. Tel.: ADVance SS91/2/3.

PHONE STAINES 55298 for SALE or HIRE;
AIR RECEIVERS (70) available, 4ft. x 1ft. 2in.
up th 30ft. x 7ft.

TANKS, Cyl., Rec. and Sec., up to 12,000 gallons.
Stock lists available.

HARRY H. GARDAM AND CO., LTD.,
100 Church Street, Staines.

STEEL BUILDING, Romney Type,
framework only, with doors, 100ft. x 35ft. approx.
Also Two WOODEN BUILDINGS, 60ft. x 20ft. Perfect
condition. Cheap.— LIVESEY, B Leamington Road.
Aliadale, Southport.

RAILWAY SLEPERS, Second-hand. available in all grades; also BAULKS and SECOND-HAND TIMBER. Delivered by motor anywhere.—Apply F. PEART AND CO., LTD., Park Road, West Hartlepool. Telephone: Hartlepool 2141.

SUCTION HOSE, new and second-hand. 4in.-2½n.-1½in., with couplings, 5½in. x 8ft.. new soft ends.—GORE, 12 Tavistock Road, E.18. Tel.: WANStead 1909.

FOR SALE, Corrugated Steel SHEETS, new and \$/H. Most sizes and gauges in stock. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.S. Tel.: ADVance \$691/2/5.

ONE or Two ROMNEY HUTS REQUIRED.

Good condition essential. State price. — Write

Box M.1151, "The Contract Journal."

RUBBISH TIP

Now open at IVY MILL LANE, GODSTONE. Phone God. 572

Order your

HARDCORE MACNOR

Anywhere in the South of England

RELIABILITY . CONTINUITY . PUNCTUALITY

MACNOR BUILDING SUPPLIES LTD 87 BRIXTON HILL . LONDON . S.W.2 Tul. 2964 Tul. 5444

SPECIAL OFFER OF LARGE SIZE TUBE

All of these sizes can be supplied plain ends or fit Also in stock a quantity of 24in. Tube, flanged in lengths of approximately 24ft.

Large stacks of smaller size Tube always availab

MIDLAND IRON & HARDWARE CO. (Cradley Heath), LTD., CRADLEY HEATH, STAFFS

Telegrams: Pipes, Cradley Heath

Telephone: Credley Heath 56364-5-6

All sheets are eyeletted and roped. Immediate delivery — Carriage paid. Money refunded id not satisfied. MORELAND TRADING Co. Ltd. (CJ) 25 St. Pancras Way, London, N.W.I rner William \$310 and 2583

10ft. x 7ft. . . £1 4 0 | 20ft. x 10ft. . . £4 15 0 | 10ft. x 10ft. . . £1 18 6 | 20ft. x 14ft. . . £5 10 0 | 14ft. x 10ft. . . £2 15 0 | 21ft. x 20ft. . . £9 12 6

W. A. SKINNER & CO. LTD.

LONG DITTON, SURREY Phone: EMBERBROOK 1960-1961

SUPPLIED AND ERECTED IN ANY DISTRICT

T I M B E R.

Oak Wagon Solebars, 15/16ft. x 12in. x 5in. x 32/each. Oak Wagon Headstocks, 8ft. x 12in. x 5in. y 2-each. Oak Wagon Headstocks, 8ft. x 12in. x 5in. y 2-each. Railway Simbers, 4/11ft. x 12in. x 12in.

FOR temporary roadways and compound fences, C. EVANS AND SONS, LTD., offer Summerfeld TRACK, 500 rolls, each 25vd. x 10tr., interfaced at 9ln. centres with 3gin. M.S. rod; and Pierced Steel TRACK (airfield strip), standard 10ft. x 16ln. x 13ln. First-class, re-layable. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

WANTED, SCAFFOLDING, PROPS, etc., and all types of NON-MECHANICAL BUILDERS'

VALUE AND A SUMMER AND A SUMMER

CROSSING TIMBERS, 300 tons, 9ft.-12ft.

bins, etc. Keen prices quoted, collected or delivered to your site. — GORE, 12 Tavistock Road, E.18.

S L E E P E R S.

100 tons Crossing Sleepers, from 9ft. to 13ft.

WANTED, Braithwaite SECTIONAL TANKS or LOOSE PLATES, 4ft. square, 346in. thick.—FRED WATKINS (ENGINEERING), LTD., Coleford, Glos.

FOR SALE, NISSEN HUTS, Galvanised Sheeted, 36ft. long x 16ft. wide, at £75 each. DITTO, Black Iron Sheeted, at £65 each. F. JAMES & SONS, Newport Pagnell, Tel. 18 and 19. FOR SALE, SCAFFOLD MATERIALS.
For keen prices, service and quality.
Contact: C. EVANS AND SONS. LTD., Burnside Wharf,
Burnside Street, Bow, E.S. Tel.: ADVance 5691/2/3. STEEL GUTTERING, IRONWORK, SHEET
METALWORK.—E. STEPHENS AND SON, LTD.,
Bath Street, E.C.1. Tel.: CLE. 1731.

NEW STEEL BUILDING FRAMEWORKS

from stock:

60ft. x 21ft. x 12ft. to eaves, £205.
22ft. 6in. ROOF TRUSSES, £12 10s. each.
30ft. ROOF TRUSSES, £22 10s. each.
STANCHIONS to suit. Other sizes built to order. BUNTING.

Mansheld Road, Aston, near Sh Telephone: Aston Common 2

MOBILE SITE OFFICES MOBILE DORMITORIES MOBILE WASH-HOUSES

Everything MADE MOBILE by: LANDSMAN'S SERVICES . BUCKDEN . HUNTS.

RELAYABLE & ROADWAY SLEEPERS CROSSING TIMBERS

ALL LENGTHS

Delivery ex stock

JOSEPH STANDISH Ltd Hunslet, Leeds 9

Tel: 21491

NEW TARPAULINS

EXACT SIZES ONLY

JUTE, 1602, before green wax proofing: 12' x 9' each 66', 15' x 12' each 106', 18' x 12' each 115/6, 21' x 15' each 156'6.
FLAX, 1602, before green chemical proofing: 12' x 9'

21' x 15' cach 136/6.
FLAX, 1602, before green chemical proofing: 12' x 9' cach 87/6, 15' x 12' cach 139/-, 18' x 12' cach 136/6, 21' x 15' cach 215/-.
COTTON DUCK, 140z. before green wax proofing: 12' x 9' cach 90/6, 15' x 12' cach 148/6, 18' x 12' cach 174/-, 21' x 15' cach 253/6.
BRAND NEW SHEETS, carriage paid England and Wales. Fitted long ropes. Brass cyclets and strengthening patches.

ANY QUANTITY FROM LONDON STOCK

JOHN MACNAMARA & CO. LTD.
Bush Road, Deptford, London, S.E.8 BER 3275-1435 Bush Road, Deptford, London, S.E.8

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, ETC.

CAST-IRON SPIGOT and SOCKET PIPING, CAST-IROV.

Gim. bore, 100t.

Sin. bore, 200t.

Sin. bore, 200t.

Sin. bore, 200t.

Sin. bore, 200t.

Sin. bore, 500t.

Sin. bore, 100t.

Sin. bore, 11 x 12tt. lengths.

Sin. bore, 200t.

Sin. bore, 200t.

Sin. bore, 200t.

Sin. bore, 500t.

Sin. bore, 500tt.

Sin. ndard lengths. Immediate delivery. 9in. bore, 200ft. 8in. bore, 500ft. (Screwed Gland), 6in. bore, 500ft.

SUPPLEMENT

Full details on request.

FRED WATKINS (ENGINEERING), LTD.,

Coleford, Glos.

Coleford, Glos.

SOUND SECOND - HAND PLANT.

1,000 No. 1 Acrow PROP5, 39,6 each; 500 No. 2
Acrow PROP5, 45,6 each; 20,000ft. 13/21ft. Steel

2cAFFOLD BOARDS, 1/31/2ft., all lengths.
A. F. SIMPSON, LTD.,
68,70 Penge Road, South Norwood, S.E.25,
Telephone; Sydenham 3131 (3 lines).

Telephone: Sydenham 3131 (3 lines).

SHUTTER PANELS for SALE: 1,300 2ft. x
2ft., at 12/6 each: 150 3ft. x 2ft., at 15/6 each.
TELESCOPIC CENTRES: 100 9ft. to 15ft., at 51/each: 30 6ft. to 9ft. at 38/each. All excellent condition. Inspection Hatheld.
Write Box M.9960, "The Contract Journal."

STEL-FRAMED BUILDINGS for SALE,
8ft. to 400ft. clear width, as workshop, storage, hangar buildings, etc.—Please write details of requirements: BELIMAN HANGARS, LTD., Hobart House, Grosvenor Place, London, S.W.1.

COMPLETE STEEL FRAMEWORK (second-hand) for storage building, 75ft. x 50ft. x 15ft. to eaves: Roof Trusses, Purlins, Stanchions, Sheeting Rails, etc.—Offers to: E. L. F. DAVEY AND CO., LTD., 306 High Road, liford.

LATTICE STEEL ERECTION MASTS (Light and Heavy), 30ft. to 150ft. high, for immediate HIRE.—BELLMAN'S, 21 Hobart House, Grosvenor Place, S.W.1.

NEW ROADFORM PINS for SALE.

Made to your specifications, 1in. or 7aln. dia.

TRANCE MILLS (GTEEL), LTD., Temple Mills Lane,

Stratford, E.15. Tel. Maryland 260()7734.

WANTED, TRENCH SHEETS;
Acrow PROPS, any quantity. Contact: C.
EVANS AND SONS, LTD. Burnside Whart, Burnside
Street, Bow, E.3. Tel.: Advance 5691/2/3.

CONTRACTORS' AND BUILDERS'

JOHN MACNAMARA & COMPANY BUSH ROAD, LONDON, S.E.S. BERMONDSEY 3275 & 1435

IUYREX

Have just introduced their STEEL TRUSSING

for all manner of temporary load bearing structures. It's worth investigating. Write or Phone

GUYREX EQUIPMENT LTD 25 CRAVEN ST., LONDON, W.C.2 Telephone: Whitehall 2445

FOR SALE, Large Quantity of Pressed Steel SECTIONAL TANKS, 41t. x 41t. x 41t. complete with bolted cover and hinged maniled. Supplied dismantled in plates 41t. x 41t. x approx. 1sin. thick. Delivery ex stock. —THE MDLAND IRON AND HARDWARE CO. (CRADLEY HEATH). LTD., Cradley Heath, Staffs. Tel.: Cradley Heath 66364-56

POR SALE, EVANS OF BOW offer from stock 2,000 "H" FRAMES, 4ft. 6in., also MALF. FRAMES, 2ft. 3in., and ADJUSTABLE JACKS. All infirst-class condition.

Contact: C. EVANS AND SONS 170 JACKS. All purpside Street. first-class condition. ntact: C. EVANS AND SONS, LTD., Burnside Wharf, rnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

DERBYSHIRE LIMESTONE, all grades, dry or tarred up to 200 tons per day, or graded smaller sizes available, delivered to site.

GEORGE DAVIS (HAULAGE), LTD.,

Bosworth Road, Nottingham. Telephone 84819

FOR SALE, 100,000 64in. x 14in. S.H. BOARDS, in good condition. Also large quantity 9in. x 3in., 7in. x 212in., 3in. x 21n., x 2in., x

FOR SALE, 6,000 RAILWAY SLEEPERS.
Guaranteed Grade 5. Suitable for sliage, roadways, buildings, bridges, machinery, etc. — Write,
riphone or call: JOHN HILROY AND CO., 290 Shirley
Road, Southampton. Telephone 76230.

NEW 14ft. DUMPY LEVEL STAFFS for SALE, 59 17s, 6d. each, carr. paid, 5% discount for lots of 10 or more. — BRUNSWICK PLANT (CARDIFF), LTD., Corner Park Garage, Pontyclun, Glam. Tel. 245.

SLEEPERS for access roads and all purposes.
Timbers for shoring, paling boards and waling. TIMBERS for shoring, paling boards and waling Consult us first.
TILLEYS (WOLVERTON), LTD., Wolverton, Bucks FOR SALE, PUTLOGS, Steel and Alloy, 5ft. and 6ft. Large stocks always available. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

TARPAULINS EX STOCK

Also OILSKINS. Prices from PODMORE WORKS 769/773 Garratt Lane, S.W.I7. Tel: Wimbledon 7622

GRANITE SETTS

DELIVERED ANYWHERE

HARRIS & BAILEY LTD. CROYDON ADDiscombe 3181 Ref: Mr. T. A. Jones

RAILWAY **SLEEPERS**

10,000 in stock BEFORE ORDERING RAILWAY MATERIALS OF ANY KIND WRITE OR TELEPHONE :

E. L. PITT & Co. (Coventry) Ltd. BRACKLEY TOWN STATION, BRACKLEY, NORTHANTS

Telephone: BRACKLEY 2271/2 Telex: 83159

TYPES SUPPLIED FIRST-CLASS ERECTION SERVICE Phone: ORPINGTON 26641 (3 Lines)

YOUNGS OF ORPINGTON LTD. 211-215 HIGH ST., ORPINGTON KENT



PLECTRICIANS. — Send for details.
SHAFTESBURY LIGHTWEIGHT "BANTAM"
LADDERS. Top section fitted with patent MOULDIB
RUBBER BLOCKS, eliminate possibility of scratching
or marking walls, fasclas and other painted or highly
polished surfaces. Also available for immed. delivery.
RESTLES, AFFORM STEPS, TRESTLES, TELESCOPE
RESTLES, AFFORM STEPS, TRESTLES, TELESCOPE
AND All sizes of Two and Three Section EXTENSION
LADDERS.

and all sizes of two end times LADDERS, SHAFTESBURY LADDERS, LTD. (C.J.), 453 Katherine Rd., London, E.7. Grangewood 3363-4.

453 Katherine Rd., London, E.7. Grangewood 3363-4.

TARPAULINS.—Special offer. New 1806
Fiax Tarpaulins, complete with brass evelets foot
Fiax Tarpaulins, complete with brass evelets foot
Fiax Tarpaulins, complete with
Fig. 29 ea. Carriage paid 62 ea. 18ft. x 15ft. x 15ft. x 15ft. at 56 ea. Carriage paid London
evelets and ropes: 18ft. x 15ft. at £6 15s. ea.
18ft. x 12ft. at £6 ea. Carriage paid London
area. Carriage extra Great Britain, 6/- 8a.
68-70 Penge Road, South Norwood, S.E.25.
SYDenham 3131/4.

SYDenham 3131/4.

NEW HUTS AT OLD PRICES.

60ft. x 20ft. £395, with floor.
60ft. x 15ft. £350, with floor.
40ft. x 20ft. £280, with floor.
30ft. x 15ft. £185, with floor.
67 x 10ft. £80, with floor.

GOft x 20ft. £395, with floor.
GOft x 15ft. £350, with floor.
GOft x 15ft. £350, with floor.
30ft. £28t. £280, with floor.
30ft. £185, with floor.
15ft. x 10ft. £185, with floor.
To save money, compage these prices.
PANEL-LASTIC CONSTRUCT.
Belivedere Works, Railway Terrace, Feitham, Mid

CHESTNUT FENCING and POSTS.
also WATTLE HURDLES and INTERWOVEN
PANELS. Prompt deliver from works at Crowden
and Sevenoaks.—BERNAKES from Works at Crowden
DUCTS), LTD. 52 Court Road, London, S.E.ZS.
Telephone: LIVingstone 5089.

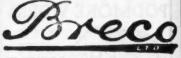
GALVANISED CORRUGATED SHEETS.
New sheets in various gauges. Large stocks and competitive prices, delivered anywhere.—Details from F. PEART AND CO., LTD., Park Rd., West Hartlepool, Telephone: Hartlepools 2141.

FOR SALE, 400,000ft. Steel SCAFFOLD TUBE, cut lengths 5ft. to 16ft. First-grade condi-tion.—Contact: C. EVANS AND SONS, ITD., Burnside Whart, Burnside Street, Bow, E.3. Tel: ADVance 5691/2/3.

FOR SALE, 120 tons good re-usable PIERCED STEEL PLANKING, in 10ft. lengths. JOHN LEE AND SON (GRANTHAM), LTD., Grantham, Lincs. Telephone: Grantham 1721.

CLINKER ASHES

for housing and building sites, playing fields, tennis courts, etc. HARDCORE, SAND & BALLAST. RUBBISH CLEARED



198 DRAKEFELL ROAD, BROCKLEY, S.E.4 'Phone: NEW CROSS 4829

Most sizes and types are stocked and special tarpaulins can be made to individual specifications. Excellent materials and fine workmanship. Wholesale only AS GOOD AS A ROOF

Please write to Tarpaulin Department
SINGLETON, FLINT & CO., LTD.
NEWLAND WORKS, LINCOLN
Phone: 24542 (2 lines) Grams: Singleton Lincoln

Genuine Bargains in Ex-Gov. Recond.

PLAN CHESTS

Double Elephant size. Soft-wood, reconditioned. Rich brown finish.

.. £20 15 0 .. £23 0 0 .. £25 5 0 Drawer

10 Drawer .. £25 5 8
Carriage El 10 0
Enquiries invited for plan chests — steel,
mahogany, new or reconditioned





Foolscap, plywood panels. Finish rich brown shade. Recondition 46 15 Carriage 15/- extra

FORMS



FOLDING TABLES from 27/6. FOLDING CHAIRS 12/6, and many more bargains in Office Furniture, Racks, Benches, Cupboards, Lockers, etc. Write for Illustrated Lists

Bloom & Spivack (Furniture) Ltd., 87 Old Street, London, E.C.I.

0

AM LDED Ching lighty livery: OPIC DERS, SION

63-4

802 (not

ES.

VEN ydor PRO-E.25

TS.

OLD ondi-nside ance

gths. ham.

ED

D.

MISCELLANEOUS ITEMS, BUILDINGS, PROTECTIVE CLOTHING, FENCING, TARPAULINS, BTC.

F O R S A L E. Sp0 tons re-layable 75lb, per yard F.B. RAILS, in 36ft. lengths, with fishplates and fishbolts, etc., to suit.

10 CROSSINGS in re-layable 75lb, per yd. F.B. rail, with all necessary fittings.

100 tons of re-layable 95lb, per yd. B.H. RAILS. in 60ft. lengths, with fishplates to suit.

2,000 re-layable CHAIRED SLEEPERS, suitable for 95lb, per yd. B.H. rail.

EDWARD ASH, LTD..

Kent Wharf, Creekside, Deptford, London, S.E.B.

FOR SALE. ADJUSTABLE PROPS, 1.500 Type 1X, 400 Type No. 2. 1.000 Type No. 1, 200 Type No. 2. 1.000 Type No. 3. All in perfect condition, no. 2. 1.000 Type No. 3. All in perfect condition, No. 2. 1.000 Type No. 3. All in perfect condition, No. 2. 1.000 Type No. 3. Tel. Burnside Wharf, Contact: C. EVANS AND SONS, LTD., Burnside Street, Bow, E.3. Tel.: ADVance 5691/2/3.

FOR SALE SCAFFOLDING, 5/21ft, lengths. Large quantities. SCAFFOLDING COUPLINGS, all types, new condition.

Keen prices.

HUNTS: AND BEDS. MACHINERY CO.,

13 Huntingdon Street, St. Neots, Hunts. St. Neots 108. WANTED, surplus stocks of COAI NLACK, FILTER COKE and other types of SOLID FUEL. C.A.G. (LONDON), LTD., Industrial Fuel Distributors, 122 Westbourne Park Road, London, W.2. Telephone: BAYswater 2286/9.

BAYswater 2288/9.

TRENCH SHEETS, 6ft.-12ft., available for SALE and HIRE. PLANT AND BUILDING EQUIPMENT, LTD., Chatfield Works, 1 Chatfield Road, Battersea, London, S.W.11. Telephone: BATtersea 9213.

WANTED, Alloy and Steel TUBULAR SCAFFOLD, in large quantities only. Sites cleared anywhere. Also NON-MECHANICAL BUILDER PLANT. Contact: C. EVANS AND SONS, LTD. Burnside Winshige Street, Bow. E.S. Tei., Durnside Sons (2.5. Tei., Durnside Sons (2.5. Tei., Durnside Sons (2.5. Tei.)). TARPAULINS for SALE and HIRE EDWARD ASH, LTD., Kent Wharf, Creekside, Deptford, S.E.8, Telephone: Tideway 2661/2.

RAILWAY SLEEPERS, 5,000 all grades, 8ft. 6in. x 10in. x 5in., from 7/6 each.

7/6 each.

OAK WAGON SOLE BARS, 15ft. x 12in. x 5in.
Ideal for silage construction, 35/- each.
SOTWOOD PLANKS, 7ft. x 7in. x 2½in.:
500, £75; 1,000, £140.
Orders of £75 delivered 100 miles.
BUNTING, Mansheld Road, Aston, near Sheffield.
Telephone: Aston Common 259.

SECTIONAL TIMBER BUILDINGS

For quality with economy, buy "MIDDLESEX" Standard size range from 8' x 6' to 100' x 30'

J. E. LESSER & SONS LTD.
GREEN LANE HOUNSLOW, MIDDLESEX
Telephone : HOUNSLOW 7281/7

NEW SCAFFOLD BOARDS, — Selected Swedish Whitewood 1-12 boards, 1/8³s ft.; 13 to 50 boards, 1/6³s, ft.; 51 to 100 boards, 1/5³y ft.; 100 boards or over, 1/4³s. With 1ln. x 20-gauge galvanised hooping and binding. Quantities ever three standard—prices on application. Delivery from stock, carriage paid 25-mile radius.—H. C. HILL, LTD., 68-70 Tenne Road, South Norwood, S.E.25. Telephone: SYDenham 3131/4.

STEEL.—60 fons I in. Square Grip Mild, new, stock rusty; 40ft. long R.S.I.s. Channels: wide range and good stocks second-hand and stock rusty M.S. Rounds, mest diameters. CORRUGATED IRON, second-hand, galvanised and black.

A. F. SIMPSON, LTD., 68-70 Penge Road, South Norwood, S.E.25. Telephone: \$70enham 3131 (3 lines).

FOR SALE, Little Giant Burton DOUBLE COUPLERS, 50,000 in perfect condition. SWIVELS, IOINT PINS and PUTLOG CLIPS also available. Contact: C. EVANS AND SONS, LTD., Burnside Wharf, Burnside Street, Bow. E.S. Tel:. ADVance 5691/2/3. SPOT CASH FOR SECOND-HAND HUTS.

PANEL-LASTIC CONSTRUCTION CO., LTD.,
Belvedere Works, Railway Terrace, Feltham, Middlesex,
Telephone: Feltham 5761.

AEROPLANE HANGARS and LARGE SHEDS, new and S/H, up to 150ft, clear span. Ex stock. For Immediate delivery and erection.—WESCOL, Lumbrook Mills, Northowram, Hallfax, Telephone: Hallfax 8168.

WANTED, used Corrugated Steel SHEETS from 4ft. and up, 22-gauge or heavier. Also Anderson and Elephant SHEETS. Contact: C. EVANS AND SONS. LTD., Burnside Wharf, Burnside Street, Bow. E.3. Tel.: ADVance 5691/2/3.

FENCING in OAK, prepared to specification, delivered any area. Also GATES and POSTS, all sizes, fitted fromwork. Keen prices.—J. P. WILLIAMS, Middleton Road Sawmills, Oswestry. Telephone 590.

WANTED. CORRUGATED STEEL SHEETS, S.H. Any area. Sites cleared, Prompt payment.—J. DUFFY. Bank Street, Clayton, Manchester, 11. Telephone: East 3361.

COOPIG Supplied of the Charles of the Charl SUPREME TO PERSON

From January 1st, 1960 prices of Improved Blawforms are Reduced by 15%.... made possible by quantity production.

PRICES REDUCED 15% New Improved "BLAWFORMS" meet all the demands imposed by present-day high-speed construction methods, and incorporate: 3 in. Channel Uprights, in five lengths, form part of the working face and are used with wall ties . 3 ft.x I ft. Anchor Panels used with wall ties * Complete range of 3 ft. Panels for deeper pours • Lap or Make-up Angles give perfect finish to lift joints • 3 ft. x 2 ft. Flexible Panels for curved or circular work . New Fixing Clip permits use of standard tubular scaffolding for align-

> Fully interchangeable with your existing stocks of Blawforms.

improved BLAWFORM

WALLS . FLOORS . BEAMS **COLUMNS · BLOCK MOULDS** CIRCULAR TANKS

BLAW KNOX LIMITED 90/94 Brompton Road . S.W.3 Box No. 146

CONSIDERABLE reductions for quantities.
BRASS WOOD SCREWS, countersunk head,
slotted; round head, slotted, etc.
COPPER BOAT NAILS, countersunk head, rose head.
WIRE NAILS, mild steel, galvanised;
No. 12: 6,000lb. 3-jain. x Mo. 7.
WIRE NAILS, galvanised, brad head; 43,000lb. 11-sin.
x No. 13.

Full specifications, etc., on request.

BUTLER TRADING (SOUTHSEA), LTD.,

80 Marmion Road, Portsmouth. Telephone 25244/S.

FOR S.A.L.E.

BOILER TUBES, in new condition, internal dia.

10 in., wall thickness lain. Lengths: one at Sft.;
one at 12ft.; one at 14ft.; two at 16ft.; eight at 17ft.; three at 18ft.; 18 at 20ft. Also
number of Curves, 88ft. total.

CAST-IRON TUBES, Gin. dai., 80 lengths at 18ft. 6in.
Approx. 18 tons.

A. KING AND SONS, Street, Norwich. Tel.: Norwich 28541 (5 lines).

Ber Street, Norwich. Tel.: Norwich 28541 (5 Ilnes).
FOR SALE, Steel and Alloy SCAFFOLD.
TUBE and BLADE-END PUTLOGS. DOUBLE
COUPLERS, IOINT PINS, SWIPEL COUPLERS, PUTLOG
CLIPS also available in quantities.
PLANT AND BUILDING EQUIPMENT, LTD.
Chatfield Works, 1 Chatfield Road, Battersea, London.
S.W.11. Telephone: BATTERSEA 29213.
WANTED, STEEL ROUNDS, SECTIONS,
CORRIGATED SHEETS. Steel and Alloy
SCAFFOLDING. THINNS, SCAFFOLDING,
AUTOMOTION STEEL ROUNDS, SECTIONS,
CARPOLDING PHINNS, SCAFFOLDING,
AUTOMOTION STEEL ROUNDS, SECTIONS,
CAPPOLDING PHINNS, SCAFFOLDING,
AUTOMOTION STEEL ROUNDS, SECTIONS,
CONCRETE SHURCH AND CO. (EDMONTON). LTD.
68/70 Penge Road, S.E.25. Tel.: SYDenham 3131

CONCRETE SHUTTERING, R.M.D. and Guyrex PANELS, SOLDERS and JOISTS, cleaned and painted, Reasonable prices. — WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

TRUSCOTT FENCING, LTD., DORKING, SURREY. Telephone 3416.
All classes of FENCING supplied and erected. Specialists in Chain Link. Estimates free.

FOR SALE, NEW ROADFORM PINS. 7cin. or 1in. dia. x 2ft. long.—TEMPLE MILLS (STEEL). LTD., Temple Mills Lane, Stratford, E.15. Tel.. Maryland 2680/7734.

REQUIRED, approx. 2,500ft. of TRESTLE PIER SECTIONS in 3ft., 4ft., 8ft. and 12ft. lengths. Write Box M.1108, "The Contract Journal."

WANTED, AIRCRAFT HANGARS.

MOLE AND BRAY, LTD.,

Stourport-on-Severn.

WANTED, BRICK and CONCRETE
HARDCORE, any quantity.—R. BARKER
(PECKHAM), LTD. New Cross 3337.

(PECKHAM), LTD. New Cross 3337.

CLINKER ASH for SALE, delivered collected, or f.o.r. Samples sent on request. Write Box V.T.388, "The Contract Journal."

SHEET LEAD (4lb. f.s. f.s.), 85/-.

TARPAULIN HIRE

JOHN MACNAMARA ACA.
BUSH ROAD, LONDON, LE.S
BERMONDSEY 2275 A 1435

EDWARD ASH, LTD.

RAILWAY SLEEPERS AND

CROSSING TIMBERS MENT WHARF, CREEKSIDE, DEPTFORD, S.E.S. Telephone: TiDeway 2001-2



BUILDINGS

FACTORY BUILDINGS, WORKSHOPS, PLANT STORES, ETC. ETC.

- No on-site riveting or welding Speedy erection Permanent or temporary High recovery value 30fc. he 100fc. clear span; lengths in any multiple of 12fc. 6in.

 Write for leaflet K.104

THE LILLESHALL COMPANY LTD. ST. GEORGES · OAKENGATES · SALOP. Oakengates 120

SUPPLEMENT

MISCELLANEOUS ITEMS, ETC.

CONCRETE POURING SKIPS.

CIRCULAR TIPPING SKIPS also available,
212 cu. vft. to 2 cu. vd. For SALE and HIRE.
PLANT AND BUILDING EQUIPMENT, LTD..
Chatheld Works, 1 Chatheld Road, Battersea, London,
S.W.11. Telephone: BATtersea \$213.

NISSEN-TYPE HUTS, 16ft., 24ft. and 30ft. span, clad new or second-hand sheeting. Also new Galvanised NISSEN SHEETS for SALE, all standard sizes. — NAYLOR'S (BILSTON), LTD., 204 Wolverhampton Street, Bilston 41689.

ELECTRICAL, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

CYLINDER HEADS.—Caterpillar, International, Ruston, Dlamond "T," B.M.C., A.E.C., Gardner, etc., perfectly repaired by our special "FUSION WELDING PROCESS" no matter how badly cracked. Finished, machined, tested standard. ACM Repairs and Front, reconditioned. Exchange P6. R6. P4 Heads. Established 40 years. Satisfaction guaranteed.—ANGEL AND WILLIAMS (PECKHAM), LTD., Sumner Road, S.E.15. Telephone: RODney 3559

RYE-ARC, LTD., Albert Dock 4381.
Safety first. New building regulations say its imperative that all small tools be at 110-Volts output. Use our new STEP-DOWN TRANSFORMERS, input 230-Volts, output 110-Volts.

WANTED, HEAVY LINE BORING EQUIPMENT for crankcases up to 6ft. long and journals Sin. dia. Ealiso Hall-Toledo Model EDY WALVE SEAT GRINDER. "The Contract Journal."

WANTED, Heavy Duty 6 x 4 LORRY or CHASSIS, in good order. Ex M.O.S. considered, Foden, A.E.C. Mammoth or similar. Write Box E.1149, "The Contract Journal."

WANTED TIPE CONTRACT JOURNAL."

WANTED URGENTLY.
Single-cyl. Blackstone DIESEL ENGINE.
CORNEILL & CO., Manchester, 13. RUSholme 1769. WANTED: 22-kW GENERATING SET.
SVD2 and SVD3 COMPRESSORS.
Write Box E.1143, "The Contract Journal."

FRANK COWLEY 200

DEPENDABLE BUSES AND GOAGHES FOR YOUR INSPECTION AND TEST

ALL VEHICLES CAN BE TAXED AT £12 10 0 PER YEAR

1948 A.E.C. 34-scater Buses, fitted A.E.C. 7.7 or 9.6 Diesel Engines. First-class throughout, £295 each.

1949/50 DENNIS 33/35-seater Coaches, fitted Dennis Big 6
Diesels and Gardner 5LW Diesels, with 5-speed gearboxes. Excellent machines, £325 each.

1948 BRISTOL 35-seater Buses, fitted Gardner 5LW Diesels and 5-speed gearboxes. First-class machines, £325 each.

1945/46/47/48 A.E.C. Guy and Daimler 39-seater Buses, fitted with modern 8ft. wide bodies, and powered by Gardner 5LW and A.E.C. 7.7 Dietels. Good, sound, clean, genuine machines, £250 each.

LEYLAND PS1 and TS8 32/35-seater Single-deck Buses and Coaches, from £175 each. All road tested and ready for work.

1947/1948 A.E.C. Guy and Leyland Double-deckers, high and low bridge, A.E.C. 7.7, Gardner 5LW and 6LW Diesels, also Leyland PDI Diesels. From £195 ea.

Write for latest stock list, also special sparse part price list showing saving of 75% on sparse.

ALL VEHICLES CARRY OUR THREE MONTHS' QUARANTEE

WILL TAKE YOUR OLD VEHICLES IN PART EXCHANGE

FRANK COWLEY

3 Blackfriars Road, Salford, 3

: MANCHESTER BLACKFRIARS 7577 and SLACKFRIARS 1048

ELECTRICAL EQUIPMENT, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

RUSTON POWER TO SERVE YOU
From stock: SERVICE EXCHANGE ENGINES,
Type YRON, VROHN, VRHN, VQBN, VPHN,
YEN, VGBN,
Full range of ENGINES from 10RB to 54RB Excavators.
SERVICE EXCHANGE ENGINES also stocked for
Cranes, Locos., Pumps, Power Packs, etc.
CHANGEOVERS to EXCAVATORS and other PLANT
UNDERTAKEN on site by STAFF of competent
FILD ENGINEERS.
TILSLEY AND LOVATT, LTD., Engine and Plant Div.
Newsteed range Estate. Trentham, Stoke-on-Trent.
Telegrams: "Diesel," Stoke-on-Trent.
Telegrams: "Diesel," Stoke-on-Trent.

NEW Ford Trader Diesel TRACTOR
UNIT, fitted with 12-ton Low-loader B.T.C. Trailer,
knock-out axle. Whole outht brand new and unregistered. Available for immediate delivery. List price
RICHARDSON'S SERUGELEY TERMS part exchanges.
RIGGELEY TERMS part exchanges.
RIGGELEY TERMS part exchanges.
RIGGELEY TERMS part exchanges.
RIGGELEY TERMS part exchanges.

J. JOHNSTON AND CO. ITD for REPAIRS, OVERHAULS and FIELD SERVICE to all types of Contractors' Plant, Mobile Cranes, etc. Phone Elgar 6905. RAPIER SPARES and SERVICE. Coronation Road, Park Royal, London, N.W.10

CIVIL engineering contractor REQUIRES G.M.C. AMPHIBIOUS DUKW in good seagoing condition.—Details and price required to Box 862, Keith and Co., 137 Princes Street, Edinburgh.

WANTED, SPARES for Browning Crane and General 407 Excavator.—W. ELL OTT AND SONS (YORK), LTD., Wetherby Rd., York. Tel. 78220.

FOR SALE, Two 1959 Commer TS3 Diesel TIPPERS, 8 cu. vd. bodies in wood with steel floors, telehoist under-floor sears, very low milesea, 900 x 20 tyre equipment. These vehicles or nodition comparable to new and well word in a condition comparable to new and well word inspection by anyone contemplating the purchase similar new machines and also interested in saving hundreds of pounds. Photograph of each vehicle available.—Further details from: GRANTHAM COMMERCIALS, 97 Barrowby Road, Grantham. Tel. 133.

GUARANTEED used TRACTOR and CRAWLER SPARES for SALE. Always dismantling good tractors. Everything available: Tracks, Rollers, Sprockets, Tyres, etc. Terms C.W.O. Money back guarantee. 300 Tractors in stock.

SHELTON, Tractor/Crawler Spare Specialist, Westwood Farm, Bulby, Bourne, Lincs. Edenham 223/4.

THE Civil Engineers' Depot for Generators can SUPPLY you with LIGHTING GENERATORS. TABLES and GLOBES. RYE-ARC. LTD. Plant Hire Division. Livertown Works, North Woolwich Road, London, E.16. Tel: Albert Dock 4381.

BEDFORD TIPPERS, 1953 A Type, Anthony Hoist, steel bodies, 50 available, ex Laings, from 5220. Lying at Wolverhampton and Stoke-on-Trent. BOUTS MOTORS, LTD., Stafford Street, Wolverhampton. Telephone 23295/6/7.

FOR SALE, International ROLLERS, TRACK PIN and BUSH GROUPS, TRACK BOLTS, Top TRACK CHAINS and other SPARES of all descriptions, Good discounts. Write Box E.9439, "The Contract Journal."



HUBS, SPROCKETS, PINIONS, PLATES, ETC

WORN SPLINES

BUILT UP AND RE-MACHINED AND MADE LIKE NEW

BOOTHAM ENGINEERS LTD YORK Phone: YORK 54588

RUSTON & PAXMAN SPARES!

Dispatched "same day" anywhere in the U.K. By the Official Stockists:

Wheatley & Whiteley 99 KIRKSTALL ROAD, LEEDS 3

Tel. 31122 Spares only Tel. 20124



AND ROLLER BEARINGS FOR ALL CONTRACTORS PLANT BRITISH . AMERICAN . CONTINENTAL



A.C. BEARINGS 245 KNIGHTSBRIDGE S.W.7

KNI 4277 KEN 9607

MATHEW BROTHERS ARE SO HELPFUL

DIESEL GENERATING SETS SALE OR HIRE YOUR ENQUIRIES WELCOMED



"Mathro" House, Beddington Lane, Craydon, Surrey THOrnton Heath 3402-3-4

HEAVY DUTY TIPPERS



FODEN (EX M.o.S.) RECONDITIONED NEW DUMPER BODY (9 cu. yd.) SANDWICH FLOOR NEW PILOT TWIN RAM TIPPING GEAR GARDNER 6LW, DOUBLE DRIVE BOGIE, 5 SPEED

EARLY DELIVERY

PRAILLS (HEREFORD) LTD., HOLMER RD., HEREFORD PHONE: HEREFORD 4221 (6 LINES)

ELECTRICAL, SPARES AND OVERHAULS, VEHICLES AND ANCILLARIES

S PARES FOR SALE.
C.P.T. Compressors.
Blaw Knox 124.
List prices less 4 per cent. discount for complete lots.
Wiscom PLANT HIRE, LTD..
Weedon Rd.. Northampton 161. Northampton 4653/4.

Weedon Rd., Northampton. Tel.: Northampton 4653/4.

DIESEL ENGINES SERVICE EXCHANGE
For Smith Excavators, Ingersoll, C.P.T. and other
Compressors. Foden and E.R.F. Dumpers and Tippers.
Mulr-Hill and Chaseside Loaders and Dumpers.
Field service available day and night.
TILSLEY AND LOVATT. LTD..
Engine and Plant Division, Stoke-on-Trent.

FOR SALE, 300/400-Amp Murex Diesel driven WELDING SET, Perkins P4 Engine, on pneumatic-tyred trailer, — WILLIAM G. SEARCH, ITD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

TWO Seddon Medium W.B. TIPPERS, under 3 tons, with alloy bodies, both in excellent order: 1956, £500: 1952, £275.—SHELTON, Bulby, Bourne, Lincs. Telephone: Edenham 223/4.

BRISTOL ANGLEDOZERS & EQUIPMENT. Immediate SPARES and REPAIR SERVICE for all models.—H. A. SAUNDERS, LTD., Main Distributors, The Butts. Worcester. Telephone 6631.

WE BUY: REPLACEMENT PARTS for Caterpillar Tractors. — Send offers to Box Q.Q.396. The Contract Journal."

LOW-LOADING TRAILER, 25 to 40 tons.

P. BATES, Sunniside Farm, Iveston, Leadgate,
Co. Durham. Telephone: Consett 359.

RUSTON

SERVICE EXCHANGE ENGINES GENUINE SPARES

TILSLEY & LOVATT

STOKE-ON-TRENT, STAFFS

PHONE: 57331/2

GRAMS: DIESEL

COACH SPECIALISTS of the SOUTH

always have available a

Large stock of Good Used **PASSENGER VEHICLES**

many with C.O.F.s

Ideal for conveyance of staff Yearly Road Fund Tax £12.10.0

BEDFORD 26 str. Coaches from £75 or suitable for SITE OFFICES, from £50

A.E.C., LEYLAND, etc., 33/35 str. from £100

Let us demonstrate at your premises

Ł. J. BAKER & CO. (DORKING) LTD.

The Coach Works, Farnham Trading Estate, Farnham, Surrey. Telephone: 4626/7

PLANT



BOTTOM DISCHARGE and TIPPING TYPES M. E. ENGINEERING LTD. 487 FINCHLEY RD., LONDON, N.W.3 HAMPSTEAD 7481-2-3

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

FOR SALE.

Benford 18/12 Reversing Drum MIXER, with Weighgear and Scraper, electric drive, new December, 1957, good condition.

Also similar machine with new Petter AVA2 Diesel Engine.

Mono-Rail Petrol- and Diesel-driven POWER WAGONS, 1,500ft. Rail and, Stands.

J. J. JOHNSTON AND CO., LTD., 271 UNDridge Road, London, W.12.

Tel.: Shepherds Bush 6941/2/3.

For S A L E.

Flat SSL, £650.

Flat SSL, £650.

Flow Flat D4, £575.

BTO6, with Blade, £675.

BTO7, B S A L E. s, complete with Blade and Winch, £900.

ONE 320-h.p. 500 r.p.m. 4-cyl. Petter Superscavenge DIESEL ENGINE, No. 4RA347, complete with air-starting equipment, numerous spares, including four new pistons, liners, con. rods (latest type), cylinder head, etc.—Offers (including dismantling and loading as and where standing) to ARENIG GRANITE CO., LTD., Arenig, near Bala, North Wales.

F O R S A L E.

One Ruston \$931 byd. SCRAPER, well shod, £950.

One Ruston \$931 byd. SCRAPER, on 1600 x 24-ply tyres, good condition, well shod, £300.

P. MERRIMAN, LTD., 45 Lelcester Road, Syston, near Leicester. Tel: Syston 3021.

ONE Chaseside Diesel LOADING SHOVEL (1950), in first-class mechanical condition, £225. Several others from £100.—SHELTON, Bulby, Bourne, Lincs. Telephone: Edenham 223/4.

FOR SALE, New 8cwt. Greens Griffin Vibratory ROLLERS. Immediate delivery from stock.—WILLIAM G. SEARCH, LTD., Whitehall Road, Leeds, 12. Tel. 639081 (10 lines).

WANTED, 24RB EXCAVATOR.
Write Box P.1168. "The Contract Journ

VALES PLANT REGISTER, LTD.

OFFER FOR IMMEDIATE SALE:

NEALS NM 2-ton MOBILES, 35ft. Lattice, Ruston Engine, pneumatics, 1951/2, £1,100/£1,250 ea.

JONES KL44 MOBILES, 24/30ft. Jibs, Ruston Engines, 1953/4, £2,200 each.

NEALS QM 4/6-ton MOBILE, 30/50ft. Jib, 1955, pneumatics, £2,878.

SOOTH 3-ton Steam SHUNTING LOCO., 4ft. 8½n., guige, 53ft. Jib, 1951. Completely overhauled,

pneumatics, £2,875.

BOOTH 5-ton Steam SHUNTING LOCO., 4ft. 8¹2in.
gauge, 35ft. Jib, 1951. Completely overhauled,
£1,150.
BUTTERS 3-ton 2-motor Electric DERRICK, 120ft.
BUTTERS 5.555. £2,250.
BUTTERS 1954. Page 1957.
ANDERSON 5-ton Steam DERRICK, 90ft. Jib, new
1947. In good condition, £1,100.
ANDERSON 7-ton 2-motor Electric DERRICK, 120ft.
Jib. 1954. Bogies available, £4,950.
BUTTERS 10-ton 10-ton Electric DERRICK, 70ft.
Jib. 1954. Bogies available, £4,950.
BUTTERS 15-ton 2-motor Electric DERRICK, 120ft.
Jib. 1955. Price on application.
COLES R2310 5-ton Diesel/Electric RAIL, 30ft. Jib,
paguge, with magnet, perting sequence, with magnet, perting seque

FREQUENCY CHANGER by etropolitan-Vickers, 400-V 3-phase 50/100 ONE FREQUENCY CHANGER by Metropolitan-Vickers, 400-V 3-phase 50/100 cycles, with starter, in first-class condition, price \$300.—J. O. GRANT AND CO., LTD., Frederick Road, Pendicton, Salford, 6.

ONE 10RB EXCAVATOR, Serial No. 15822, fitted with 3VRH Ruston Engine c-w Skimmer and Backacter Equipments, price \$1,600. Apply C. FIRBANK (ENGINEERS), LTD., 276a Dallow Road, Luton, Bedfordshire.

WANTED, CRAWLER TRACTORS, with or without Equipments; also TRACTORS with Loading Shovels, and Loose Equipments. — N. M. GREEN, Kirkby Underwood, near Bourne, Lincs.

SALE OR HIRE

THE GREENWICH PUMP & PLANT CO.

LTD. DENHAM ST., GREENWICH, S.E.10 GREENWICH 3189

DRAGON PLANT HIRE LTD.

Excavators, Bulldosers, Overloaders, Crawler-Cranes, Trenchers, Dumpers, Mixers, Pumps, Drott Shovels, Road Rollers, Scrapers, 10 ton Articulated Loader, etc.

FOR HIRE EVERYWHERE RING GUILDFORD 67277

PLANT SALES LTD.,

25 CASTLEREAGH STREET, LONDON, W.1 Telephone: PADdington 2663-4

FOR HIRE

SIDEBOOM TRACTORS:

SIDEBOOM TRACTORS:

TRACTORS:

HD7, HD10, HD14, Dozer or Scrapers.

D4, D6, D8, Dozer or Scrapers.

TRACTO-SHOVELS:

HD5G, with 1'4 cu. yd. Bucket.

HD9G, with 2'2 cu. yd. Bucket.

EXCAVATORS:

10RB, 19RB, all equipments.

J.C.B. Hydra-Digga, all equipments.

DUMPERS:

Aveling, 4'2 cu. yd.

Rob Roy, 15cwt.

ROLLERS: 5-ton and 8-ton, Diesel.

CRANES: 10-ton, lorry-mounted, 30-60ft. Jibs. PUMPS: 3in. L. and F. Diaphragm. 3in. Centrifugal.

MIXERS: 5/31₂, 7/5, 10/7, 14/10. TIPPING LORRIES: Austin 6 x 4.

G. CARTER & SONS, LTD.

YOKESFORD HILL, ROMSEY, HANTS. Telephone: Braishfield 395/6/7.

PORTABLE RAILWAY MATERIAL

10 MILES NEW 2ft. GAUGE 20 lbs. TRACK ON HEAVY STEEL SLEEPERS POINTS AND CROSSINGS, TURNTABLES, ETC., TO MATCH



150 Hudson 2 ton and 4 ton

200 Hudson "Rugga" 27 cu. ft.? 2ft. gauge Side Tipping Wagons

2R. GAUGE DIESEL LOCOMOTIVES BY MOTOR RAIL AND RUSTON

IOSEPH PUGSLEY & SONS L BRISTOL 5.

Tel: BRISTOL 56037

GRAMS: PISTON BRISTOL

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

SUPPLEMENT

A. LONG AND CO., LTD.

Butters 107 Steam DERRICK CRANE, oil-fired, 120ft.

Westwood 86/78 cu. ft. Double Rope GRAB, with
digging teeth, weight approx. 3 tons.

Albaret Model CE. So. John pneumatic-tyred COMPAC
Ruston and Hunslet 20/40-h.p. Diesel LOCOMOTIVES,
24in. pauge.

Ruston and Hunslet 20/40-h.p. Dieser 24in. gauge. With Logan Electric Battery LOCO., 24in. gauge, with

Albaret Moder LER.

Albaret Moder LER.

Albaret Moder LER.

Allow Rollier 20/40-h.p. Diesel LOCOMOTIVES.

24in. gauge.

24in. gauge.

24in. gauge.

Betric Battery LOCO., 24in. gauge, with battery.

B.S.P. 70ft.

B.S.P. Siele Pile FRAME.

Woodsel St. Steel Pile FRAME.

Woodsel Hobwood BOILERS. Nos. 18, 20 and 22.

B.S.P. Single-acting Pile HAMMERS, 68 and 78.

McKlernan-Terry Double-acting Pile HAMMERS.

Siele Steen Pile Winch. 7 and 12in.

Composed Steen Pile Winch. 7 and 12in.

Cromposed Parkinson 90-h.p. MOTOR, 400-Voits,

3-phase, 50-cycles, 2.900 r.p.m. New and unused.

Vickers VR180 TRACTOR, with P.C.U. and Hydraulic Angledocar CRETE MIXER, with 30-h.p. Ruston Diesel Engine. Also spare engine available.

Blaw Knox 220-ton Bulk CeMent StorAge Silo, with Conveyor and Elevator, Ex batching plant.

Pegson SAND WASHING PLANT, complete with Conveyors, all Electricam LOCO. CRANES.

24in. gauge unused and very good second-hand 25ib. JUBILEE TRACK, with Turnouts and Turntables.

FOR HIRE:

Ruston EXCAVATORS, all sizes, all equipments.

Alfen TRENCHERS.

Muir-Hill DUMPERS.

Agents and Distributors for:

AIR PUMPS RECIPERATING and ROTARY

ARMSTRONG WHITWORTH KUE KEN CRUSHERS:

ABARET COMPACTION OLLERS:

CROSE PIPELINE EQUIPMENT.

45 Parliament Street, Westminster, S.W.1.

Telephone: Whitehall 5064/5, 6577.

Cables: Ayelong, Parl, London.

FOR SALE, 1956 J.C.B. DIGGER, complete with Dozer Blade and Loading Bucket, mounted with Dozer Blade and L

Capies: Ayelong, Parl, London.

FOR SALE, 1956 J.C.B. DIGGER, complete with Dozer Blade and Loading Bucket, mounted on Fordson Major D'esel unit. This machine has been little used and requires nothing in the way of repairs. To an interested user this is well worthy of any inspection.— Further details from GRANTHAM COMMERCIALS, 97 Barrowby Road, Grantham. Tel. 133.

Rapid expansion has decreed us Greater London's Largest Fleet Owners of

1960 1 vd. "DROTT" SKID SHOVELS



Always available for Hire

Your personal contact: MR. RONALD GENT Tel: THOrnton Heath 3402/3/4

POWER PLANT HIRE (Beddington) LTD.
Beddington Lane, Croydon, Surrey ine, Croydon, Surrey

TOR SALE,
TOWER CRANES, J. Weitz Model G12, complete with Rails and Skips, £800 each.
RENCH SHEETS, 10th., as new, 3/6 per ft.
FIBREGLASS, 10vd. rolls, 12/6 each.
P.S.P., 10th. x 15in., 12/6 per length.
SAWBENCH, 16in., 12/6 per length.
SAWBENCH, 16in., Electric, Universal type, £120.
Stothert and Pitt 10/7 CD MIXER, Petrol, £85.
PILE FRAME, 2-ton, 51ft., Sykes, £350.
AIR COMPRESSORS, \$450 to 600 c.f.m., Petrol,
Electric. Price on application.
CHADIES and Electric. Price on application.
CHADIES and Electric. Price on application.
CHADIES and Foreign Styles, 12 c. co. y. d. Capacity.
ONCRETE PLACING SKIPS, 12 to 2 c. y. d. capacity.
Maco PIPELAYING WINCHES, 12-ton to 2-ton capacity.
Maco PIPELAYING WINCHES, 13-ton to 2-ton capacity.
Maco PIPELAYING WINCHES, 13-t

FOR SALE, Caterpillar D8 TRACTOR, Serial 2U (ball change), complete with Birtley Hydraulic Bull (Angledozing Equipment. This machine has had one owner since new gramment of been out on hire. Well maintained. Price £2.650 ms works—COLBRO, LTD., Wood Lane. Rotthwell Haigh, Leeds. Rothwell 3258.

FOR SALE, Buildmaster BDK250 TOWER CRANE, 1954, available April, 1960, at Liverpool, complete with 180ft, of track, radius rails, switchgear, cable and 10ft, Jib Extension, all in good condition. Inspection by appointment, or details from 8ox P.1050, "The Contract Journal."

REQUIRED to purchase, Two Heavy Duty 3,vd. GRABS. — Details and location to: GREENHAM (PLANT HIRE), LTD., Middlemore Lane, Aldridge. Tel.: Ald. 52861.

FOR SALE, 10RB EXCAVATOR, 20 months old, Backacter with 18in, and 30in. Buckets, Skimmer conversion. Excellent condition, little used, £2,250. No agents. — Write Box P.1138. "The Contract Journal."

FOR SALE, 5-ton Steam CARGO WINCINES by Clarke Chapman, size 8in. x 12in., first-class condition, thoroughly overhauled. — R. S. HAYES, LTD., jenkins Yard, Bridgend, Glam. Tel.: Bridgend 1311.

FOR HIRE, 500 c.f.m. MOBILE COM-PRESSORS.—Call E. M. SMITH AND CO., LTD., Warrington 33616.

PLANT FO MODERN FOR MODERN PLANT FOR HIRE, with experienced operators and backed by an efficient service organisation:—
EXCAVATORS, '1, '2a and '12 cu, yd.
J.C.B. HYDRA-DIGGAS.
DUMPERS, '1c of cu, yd., Diesel.
ROMPRESSORS—Mobile and Portable, with every type of equipment.
ChapselsSORS—Mobile and Portable, with every type of equipment.
AngleDozers—International and Fowier.
CONCRETE MIXERS, '51'2 to 1 cu, yd.
ANGLEDOZERS—International and Fowier.
CONCRETE MIXERS, '51'2 to 1 4/10 cu, tt.
PUMPS, 112in. to 6in., Diesel.
Earth Rammers, Hoists, Cranes, Mortar Pans, Kange Hammers, Roadforms, Traffic Lights, Scaffolding, and most types of Contractors' Plant.
HUBERT C. LEACH, LTD.
131 High Street, Cheshunt, Herts,
Tel.: Waltham Cross 25161 (5 lines). HIRE.

WELDING PLANT FOR HIRE

COMPRESSORS.
MOBILE CRANES.
LIGHTING PLANTS.
RYE-ARC. LTD., Plant Hire
Silvertown Works, North Woolwich Road, London, £.16,
Phone: ALBert Dock 4381 (10 lines).

FOR SALE, N.C.K. 304, with three equipments, Forward Shovel, Dragline and Backacter, Toroughly overhauled where necessary and in first-class condition. PLANT SALES, LTD.

25 Castlereagh St., London, W.1. PADdington 2663/5.

AVAILABLE for immediate HIRE: 19RB and 10RB EXCAVATORS, all equipments D7. TD18 and TD14 TRACTORS, with Dozers and Scrapers. Apply: TILBURY CONSTRUCTION CO., LTD, Ruscombe Works, Twyford, Berks. Tel.: Twyford 177 (4 lines).

(4 lines).

FOR SALE.
One Ransomes CALFDOZER, little used, 5220.
Three CONCRETE MIXERS, 10/7 Fowlers, Petrol, unused, £115 each, E15 eac FOR SALE, Broomwade COMPRESSOR, F. JAMES AND SONS, Newport Pagnell 18 & 19.

DOE'S COLUMN

GRAND CLEARANCE SALE

GRAND CLEARANCE SALE

10% off all prices quoted for used industrial
machines during February.

1954 J. Frydraultic EXCAVATOR:
1954 J. B. Hydraulis EXCAVATOR on new
remould a proper of the proper of and front-mounted by cut. vd. Hydraulic Loading and front-mounted by cut. vd. Hydraulic Loading 1937 J.C.B. Hydraulic EXCAVATOR. on sery good 14 x 30 and 750 x 16 stant pneumetics, powered by a Ford 4D Diesel Engine, electric starting, with large, roomy, full-vision Cab, two Backacter Buckets, and fitted with front-mounted Hydraulic Loading Showel. on service 1.888 and 600 x 19 pneumatics, fitted to new-type fordsom Major Diesel Tractor with electric supering and complete with be cut. yd. front Hydraulic Loading Showel. The Excavator has been thoroughly overhauled, has Išin. and Zdissen 1938 Dinkum Major Hydraulic EXCAVATOR, mounted on new-type Fordson Major Diesel 1784 Dinkum Major Hydraulic EXCAVATOR, mounted on new-type Fordson Major Diesel Tractor. This Excavator has just had a new main jib fitted and the slew post rebushed; also new main jib fitted and the slew post rebushed; also new main just been fitted with a good order and 14 x 30, 758 x 16 pneumatics are in good condition. has just been fitted with a new crowd ram. The 14 x 30, 750 x 16 pnsumatics are in good condition.

Late 1956 DINKUM DIGGER, with Hydraulic Sprag with a 24in. Bucket, powered by new-type Fordson Major Decel Tractor, fitted with new machine has been very carefully maintained and in in spotless condition.

2986 1955 DINKUM DIGGER, with 24in. Bucket, powered by new-type Fordson Major Diceel Tractor on good 11 x 36 and 600 x 19 pneumatics. Blectric starting. Cab. and fitted with front-mounted Hydraulic Decaledar with \$2 ct. yd.

1955 DINKUM DIGGER, with 24in. 1988, 1985 DINKUM DIGGER, with 24in. 1988, 1988

Electric starting, Can. The control Hydraulic Dezaleda with \$\frac{3}{2}\$ cu yd. Bucket.

Bucket.

By S. Dinkum Digger, with 24in. Bucket, powered by new-type Fordson Major Dissel Tractor. Bitted with good il x \$6 and \$600 z 19

Tractor Bitted with good il x \$6 and \$600 z 19

Hydraulic Bulldozer.

By S. Dinkum Digger, with 24in. Bucket, \$958

1954 Dinkum Digger, with 24in. Bucke

ERNEST DOE & SONS LTD.

Ulting, Maldon, Essex phones: Day—Hatfield Pererel 311. Sales. Hall; works, Mr. Bennett; field service, Mr. don; stores, Mr. Woodham. Night-Sales, Hatfield Peverel 319; Service and spares, Hatfield Peverel 312.

SWEEPER/COLLECTORS

DAILY - WEEKLY - MONTHLY

Sound machines available for re-sale

WALKERS MECHANICAL CLEANSING

ROCKINGHAM ROAD, MARKET HARBOROUGH

hire it from...

Tel: SHEldon 2424



Phone. 4653 & 4654

TOTtenham (10 lines) New Delmag Diesel D5, D12, D22,

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

CONTRACTORS' PLANT for HIRE, EXCAVATORS, BULLDOZERS, 7-ton DIGHT FOR DILER, 2-ton and 5-ton MOBILE CRANES, MONORAIL TRANSPORTER EQUIPMENT, VIBRATORY FOLLERS, COMPRESSORS, MIXERS, PUMPS, etc.—Plant Deot., WM. TOWNSON AND SONS, LTD., Higher Swan Lane, Bolton. Telephone: Bolton 10140.

Higher Swan Lane, Bolton. Telephone: Bolton 10140.

NARROW TRENCH BUCKETS to fit all machines. SALE or HIRE. The Norton Backacter Bucket designed by user digs harder material and empties more efficiently. Sizes 11t. 6in./21t. 4in. IMMEDIATE DELIVERY. Other sizes within 10 days. Contact NORTON PLANT HIRE, LTD., Ramsden, Billericay, Essex. Tel.: Ramsden Heath 365/S.

From 1-tool to 12-tool (70 cl.m. to 625 c.f.m. 1.a.d.). Lorry-mounted and Portable. Full range of Pneumatic Tools.—HUBERT C. LEACH, LTD., High Street, Cheshunt, Herts. Tel.: Waltham Cross 25161 (5 lines).

Guestian of Builders' Plant, including Hand-fed and Hopper-fed MIXERS. Benford 10cwt. and 15cwt. DuMPERS, RAMMERS, BELT LOADERS, VIBRATING ROLLERS, always available expeription and prices available from HIREPLANT, LD., North Circular Road, Stonebridge Park, N.W.10.

FOR SALE.
1,500 TRENCH SHEETS, 10/12/14ft.
DUDLEY VALE. LTD.
3 Buckingham Place, London, S.W.1. VICtoria 0252.

WANTED, CATERPILLAP D4, with or without equipment. Machine requiring track attention considered. Must be cheap. — Write Box P.1030, "The Contract Journal."

FOR SALE.

Huber 8-ton Diesel ROLLER. Caterpillar

04-400 Engine. In excellent condition.

Priestman Tipere. MCCS condition equal to new,

("w with 35ft.

Luffing Shovel, 2 libs.

Bedford 5-ton, with Ingersoll-Rand Diesel 4-gun type

Compressor, in first-class condition.

BEECH'S GARAGE (HAMLEY), LTD.,

Leek Road, Hanley, Staffs. Stoke-on-Trent 23038/s.

FOR HIRE. Special rates for long term. Totals, c/w Blade and Scraper. Drotts, c/w 8-in-1 Equipment. Bray and Muir-Hill SHOVELS. Coles 31;-ton Lorry-mounted CRANE. 33vd. DUMPERS.

3yd. DUMPERS.

MARSH PLANT AND MACHINERY CO., LTD.,
South Street, Emsworth, Hants. 'Phone 2032, 2634.

FOR HIRE or SUB-CONTRACT. 955
TRAXCAVATOR and D4s available, first-class operators.—GEORGE SHEPPARD (HATFIELD), LTD.,
FOR SALE, New Single and Twin derive Label Control of the Control of t

PINGON P45B TOWER CRANE, 3-ton 49ft. radius, 1-ton 99ft. radius. Available Immediately. HIRE or SALE.—Write Box P.1167, "The Contract Journal."

WANTED to BUY, Allen Oxford GRADER.
HORTICULTURAL SERVICES, 89 Windsor Road,
Southport, Lancs.

COMPRESSOR HIRE

FOR HIRE AND SALE PNEUMATIC POKER-TYPE CONCRETE VIBRATORS. We are the concrete vibrators. On the concrete breakers, Light Picks, Clay Diggers, Rod Drills, Pumps, Backfill Rammers and Tampers, Hose and Accessories. We hold a large stock of Spares are ning live a 48-hour repair service. New and Secondhand Air Pumps COMPRESSORS for SALE. Send for list. hand Air Pumps Color III.
list.
HUBERT C. LEACH, LTD., 131 High Street, Cheshunt,
Herts. Tel.: Waltham Cross 25161 (5 lines).

Herts. Tel.: Waitham Cross 25161 (\$ lines).

FOR SALE.

1953 COUNTY CRAWLER, in sound working order, with Cab.

1955 BTD50, new tracks fitted May, 1959, Cab. excellent machine.

T. H. WHITE, Devizes (380), Wilts.

FOR HIRE, HD14 TRACTORS, with Dozers and/or 1240, Scrapers; also 3388 Ruston EXCAVATORS, 114 cu. yd., with Dragline or Shovel Equipment.

EXLAVATORS, 1'2 Cit. yd., with Dragine or Shoves equipment.

SAND AND SHINGELE, LTD.,
Faggs Road, Feitham, Middlesex. Tel.: Feitham 304S.

SALE or HIRE, 31-ton Vibro-Verken Trailer Type VISRATING ROLLER, Diesel-driven, battery start. New Nothing Roller, Diesel-driven, Conversion to choose, Stratford-upon-Avon, Warwickshire. Telephone 4242.

HAVE MONEY-WILL TRAVEL

If you have SURPLUS PLANT but profer surplus cash—if you wish to sell but have no time for so-called agents—if you are satisfied with a reasonable price for your surplus plant—then contact, with date, ecodition and price:

FIELDS, Ferest Edgs, Ringwood Road, Ferndown, Dorset.

USED **EQUIPMENT** with a **GUARANTEE**

CHASESIDE ED EQUIPMENT DIVISION

IF YOU REQUIRE A RELI-ABLE USED MACHINE YOU NEED LOOK NO FARTHER THAN HERTORD.

at prices to that an requirement of the control of

SK. 1042.—1936 LOADMASTER 800TC, Fordson Diesel Engine. All-weather Cab, Power Steering. 1 cu. yd. Toothed Scoop, tyres good (rears 1400 n. 2 cm. 1 cm. yd. Toothed Scoop, tyres good (rears 1400 n. 2 cm. 1 cm. 2 cm. 1 cm. 2 SK.1108.—1954 CHARESIDE 2 U. yu. Australia and the matter moving Jib. Locading Shovel, Fordson Dissel Engine, Cab, good tyres, very good machine. 30 days' warranty. Seen HERT. SK.1140.—1953 CHASESIDE 1, cu. yd. Loading Shovel, Fordson Diesel Engine, Cab, servicede tyres, in running under cabe tyres, in running under cabe for the company of the compa

CHASESIDE ENGINEERING CO., LTD., Used Equipment Division, Station Works, Hertford, Herts.

> Telephone: Hertford 3113-8. TAS/UED65

PRECAST CONCRETE SLAB AND KERB HYDRAULIC PRESS REQUIRED

Full details to ref. J.L.D., JAMES MILLER & PARTNERS LIMITED, Pump Lane, Hayes, Middlesex



S/H Allis HD10 with Bullgrader and Gar Wood P.C.U.

Two new 19RB SKIMMER BUCKETS complete.

Two almost new 1 cu. yd. 19RB double rope GRABS complete.

S/H 6½-ton Huber Diesel ROLLER with Caterpillar engine.

SAVILLE (TIMETER)

Penarth Road. **CARDIFF**

Tel: 33572/3

WEATHERILL HYDRAULIC

F. E. WEATHERILL LTD USED EQUIPMENT DIVISION

We can meet your Used Loading Shovel requirements either at our main Works-at Welwyn Garden City or our Depots at Walsall, Manchester and West-Hartlepool.

Hartlepool.

1959 WHITLOCK DOZALODA, fitted with to can yet Scoop, complete with lighting and drivers and street of the complete with lighting and drivers and street of the complete with the can yet Scoop, powered by Fordson fitted with the can yet Scoop, powered by Fordson Diesel Engine, 1800 x 24 rear tyres and fully anciensed driver's cab ... 24 rear tyres and fully anciensed driver's cab ... 25,390

1958 WHATHERILL Type 2HCRA, with the can yet Scoop, powered by Fordson Diesel Engine. This machine has just passed through our works and has been repainted. Tyres good ... \$1,150

1954 WEATHERILL LOADER, Type 2H, fitted with 1't, cu. yd. Scoop, Fordson Diesel Engine, 1400

1957 MERYON OVERLOADER with a cn. yet with the complete conditions and the complete condition and the complete condition and the condition of the complete condition ... \$2,200

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE LOADMASTER 700, fitted with 100 per condition ... \$2,500

1958 CHASESIDE ... \$2,500 per condition ... \$2,500 p

Ask for fuller details of these and other ma from our most comprehensive stock.

F. E. WEATHERILL LTD

USED EQUIPMENT DIVISION:

Tewin Road WELWYN GARDEN CITY, Herts.

Tel: Welwyn Garden City 4221-5



..... Low-Loading Vehicles to 45-ton capacity

FREDERICK ATTWOOD LTD.

257-273 WOOD STREET WALTHAMSTOW LONDON, B.17

COPpermill 1151 (4 lines)

F O R S A L E.
2-ton Neals NM MOBILE CRANE, 35ft. Jib,
pneumatic tyres. Ruston Diesel, 1951/2 machine:
Excellent condition. £1.275.
Pegson RAMMERS. Recent overhaul, £45.
Simplike PUMP, excellent condition, with hoses, 2in.,

pneumatic tyres, Ruston Diesei, 1991/6 machine, per Seceleint condition, \$1,275.

Pegson RAMMERS. Recent overhaul, £45.

Simplite PUMP, excellent condition, with hoses, 2in., £50.

Zin. and R. CENTRIFUGAL PUMP, steel wheels. Completely overhauled, £50.

A.C.E. 20/30/cwt. HOIST, 15-h.p. Electric Motor, complete with track, etc., £120.

A.C.E. 5/10/cwt. HOIST, Petrol Engine, with track, with the complete with State of the complete with Edge of the Complete with State of the Complete with Edge of the Complete with Spares, £1,250.

Alax B Type CRUSHER, £120.

Al

THE HERCULES PLANT HIRE CO., LTD., 45 Hornsey Road, London, N.7. Telt.: North 7074.

CONCRETE MIXERS for SALE or HIRE, 5,313, Benford Dissel-driven, on four steel wheels.
5/312, Benford High-speed Trailer Model, 1973, 1974

W A N T E D T O B U Y.
One FACE SHOVEL EQUIPMENT, complete, for
10RB 12000 Series.
One FACE SHOVEL EQUIPMENT, complete, for 19RB
11000 Series.

TWO 19RB EXCAVATORS, 10000 Series, 3-cyl. Engines, Dragline Equipments, £1.650 ea. HOLLINGS AND ANDREWS, East Busk Lane, Otter, Yorks. Telephone 2940.

WANTED, CATERPILLAR TRACTORS, TRAXCAVATORS and EQUIPMENTS: not more than hive years old.—Phone Rothwell 3258, or write JAW BONE WORKS, Wood Lane, Rothwell, Yorks.

OO Series.
METAL UNION (PLANT), LTD.,
oria Street, S.W.1. Tel.: VICtoria 4868/9.

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

FOR SALE, ex stock, at keenest prices.

Barber-Greene Model 879A (1952), fitted Perkins
PE Diesel. Recently overhauled, in very good
22R8, choice of two, 19000 Series.
19R8, 2350 of three machines from 1952, from
10R8, choice of

SUPPLEMENT

ce of several late machines, from £1,250,

19RB, choice of the factor of

Flarivester House, Stratord-upon-Avon, Warwickshire.
Telephone 4242.

FORS ALE,
Liebherr 14A Tower CRANE, Serial No. 5358,
new late 1955, in excellent condition, repainted
and offered with every confidence, little used
since new. Offers.
Consolidated Pneumatic COMPRESSOR, 2-tool,
portable, Serial No. C2233965, powered by
Ruston 3VSH No. 263731, good working
condition, £115.
Two Stothert and Pitt Trailer CONCRETE MIXERS,
10/7 Closed Drum with overrun brakes, powered
by Lister C.D., and Petter AV2 Diesel Engines,
good condition, FOR HIRE:
1212-ton Fast Travel Lorry-mounted CRANE, 30-90ft.
Jibs.
HAWLEY PLANT, LTD.,

Wilmington, Dartford, Kent. Dartford 5897/5539

MILLARS' 14/10 Closed Drum CONCRETE
MIXER, complete with Built-in Weigher, fitted
with electric motor or Ruston Diesel engine, overhauled and in excellent order. — W. V. DAVIES,
Concrete Mixer Service, Shipston-on-Stour, Phone 125.

SEVERAL Modern Muir-Hill 4½ cu. yd. DUMPERS, Type 14B, Perkins P4 Diesel Engines, electric starting, pneumatic-type wheels. Lying Glasgow.—GEORGE COHEN SONS AND CO., LTD., 600 Wood Lane, London, W.12. She. Bush 2070.

TOWER CRANE (Liebherr), 32cwt. at 20ft. and 17cwt. at 52ft. 6in. Offered at bargain price of £750 for immediate disposal.—Write Box P.1166. "The Contract Journal."



W. & J. ARMSTRONG (CONTRACTORS),

Drott Skid SHOVEL, 18 months old, worked 2,000 hours, £2,450, Allis-Chalmers HDSG, 7181, fitted new tracks, reconditioned rollers, etc., £1,750.
Allis-Chalmers HDSG, fitted new rollers, £1,550.
Allis-Chalmers HDSG, fitted with Hydraulic Angledozer, the work of the work

Please 'phone HAYes 0303/0074, or write:

V. AND I. ARMSTRONG (CONTRACTORS), LTD., 1a Byron Parade, Uxbridge Road, Hillingdon, Middx.

FOR SALE, 400 tons Larssen and Appleby-Frodingham STEEL SHEET PILES, Nos. 1, 2, 3 Sections.

No. 7 McKlernan-Terry PILING HAMMER, leg guides. Two Blaw Knox CEMENT SILOS, 30 tons capacity. New 1958.

No. 16 Spencer-Hopwood BOILER, fully insured, 110lb. Weatherill SHOVEL, 32yd. Ford Diesel. New 1955.

10. 16 Spencer-Hopwood BOILER, fully insured, 110lb. Weatherill SHOVEL, 32yd. Ford Diesel. New 1955.

10. ton PORTASILO.

P20 PORTASILO. New 1959.
P20 PORTASILO. New 1959.
P20 PORTASILO. New 1959.
P30 FORTASILO. New 1959.
P30 FORTASILO. New 1959.
STONE S

WANTED, ROAD ROLLERS, Aveling-Barford and Marshall, 7-ton to 8-ton Diesels, 1948 or later, with Scarifiers, etc. Also late 2-ton model.—Full particulars and price to A. M. COLE, Eastgate, Sleaford, Lincs. Tel. 463.

RAILWAY MATERIAL

RAILS OF ALL SECTIONS AND ALL ACCESSORIES—CONTRACTORS' PLANT, TOOLS, ETC.

INSTALLATION OF SIDINGS UNDERTAKEN

ARMYTAGE & SONS, LTD. LEADMILL ROAD, SHEFFIELD, I

FOR SALE OR HIRE
Coles CRANE, 5-ton, Diesel/Electric. Long or shire. Terms quoted. Also various other plant and machinery: COM-PRESSORS, ROLLERS, MIXERS, etc., for SALE. Please inquire.

Open weekends.
G. H. DUNNING,
Ballards Yard, High Street, Edgware.
Telephone: Edgware 2572.

KINGSTON PLANT HANWORTH . MIDDX.

FOR PUMPS AND ALL PLANT HIRE FELTHAM 4084

For Sale

ALLIS-CHALMERS

HD. 5G Tractor Shovel, 1955

£3,000

with Gar Wood hydraulic angle-dozer, Buckeye P.C.U. and Blaw Knox Digma 4 yd. Scraper, 1944 £700

Carco 'E' Winch for International TD.9 £175 Carco 'E' Winches for Fiat 55's

£350

FIAT

55L with hydraulic angledozer, recor 1952 £975 ditioned engine

55L with hydraulic angledozer, recon-ditioned engine 1954 1954 £975

MACKAY of Feltham

Mackay Industrial Equipment Ltd., [Central Way, Feltham, Middx. (Feltham 3435)

CUT YOUR PRODUCTION COSTS

BY USING THE TRITON VIBRATING TABLE FOR YOUR CONCRETE WORK

AVAILABLE FOR HIRE OR



DIRECT MANUFACTURERS VIBRATING SCREENS, HOPPERS, FOUNDRY GRIDS, TABLES, etc.

These tables are fabricated from mild steel and are supplied complete with fixing channels and rubber mountings, and can be fixed to any height you require. These machines are normally mounted on concrete blocks, which we have illustrated, thus avoiding costly supporting structures. The tables are powered by the Triton Electric Vibrating Motor, which is sturdily built and can be supplied to work from any 50 cycle alternating current circuit.

Tables are supplied in the following sizes: 2 x 2 x 4 x 3 x 6 x 3 x 4 x 4.

6 x 3 Yibrating Table as illustrated—£94 11s. 9d. complete. Other prices on application

TRITON ENGINEERING CO. (SALES) LTD.
216 SYDENHAM RD., CROYDON, Taly THORNTON HEATH 4525-1598

PLANT HAULAGE OF EVERY DESCRIPTION

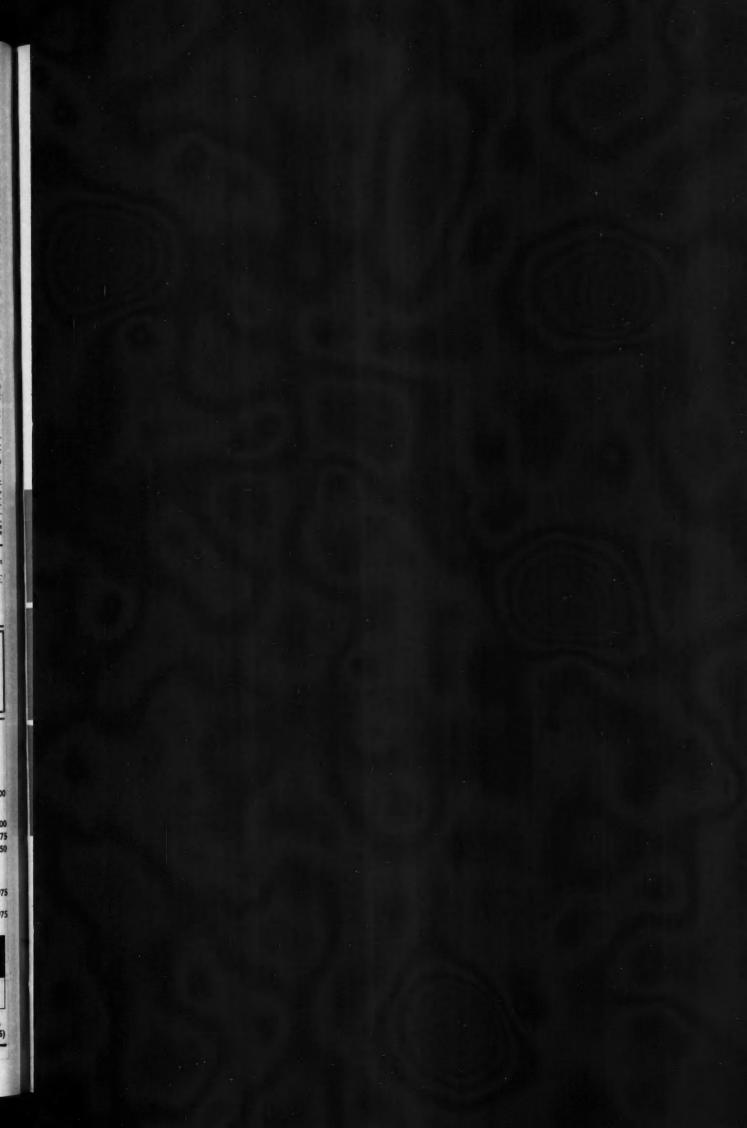
LOW LOADING & CATTERMOLES (Transport) UTILITY VEHICLES 79-89 PENTONVILLE ROAD, LONDON, N.I



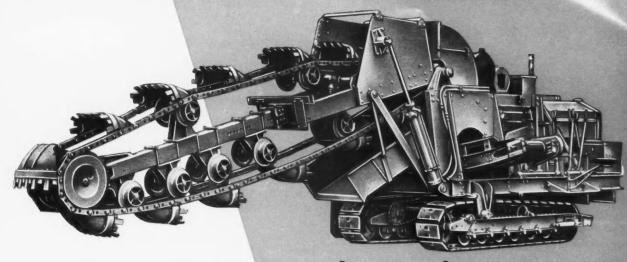
TERMINUS ICOI (7 lines)

ESTABLISHED OVER 100

YEARS







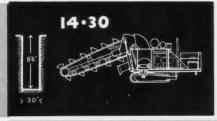
on the job

Whenever there's trenching to be done,

ideal for smaller trenches, 12 in. to 21 in. wide, down to 6 ft. deep, for water, gas, electricity, and telephone services



The versatile medium-size machine in the ALLEN range. Will dig from 14 in. to 30 in. wide, to a maximum depth of 8 ft. 6 in.



This renowned model will take out trenches from 15½ in. to 5 ft. wide, down to 14 ft. deep, for mains and sewers.



Get to know the

ALLEN

range

Full details from the manufacturers

JOHN ALLEN & SONS (OXFORD) LTD.
COWLEY, OXFORD Tel: 77155/7



the name ALLEN is the first that comes to mind. There is an ALLEN Trencher for every job — all rugged, dependable machines that leading contractors know have proved themselves the world over for

British-built and best, ALLEN Trenchers have been

getting "down to earth" for over thirty years-

digging clean, fast, precise trenches

* The Most Profitable Way to -

READY MIXED CONCRETE!

- * CAST STEEL GEAR RING
- * WELDED DRUM 10 G STEEL
- # HINGED PLATFORM FOR OPERATOR
- # DELIVERY CHUTE
 SWIVELS THROUGH 180°
- # DRUM LID LIGHT IN WEIGHT AND EASY TO REMOVE
- # HIGH QUALITY HYDRAULIC RAMS
- # FINGER LIGHT HYDRAULIC TILTING



STAR FEATURES!



- # HEAVY DUTY FINAL CHAIN DRIVE
- *TOTALLY ENCLOSED
 GEAR REDUCTION UNIT
- MEEHANITE DRUM ROLLERS
 ON TAPER ROLLER BEARINGS
- WELDED STEEL CRADLE INCLUDES
 CAST STEEL BEARING BRACKETS
- * AMPLE SIZE HYDRAULIC OIL TANK WITH OIL AND AIR FILTERS
- STRONG WELDED STEEL FRAME & SUB-CHASSIS SPREADS THE LOAD
- *ROBUST CONTROL VALVE AUTOMATICALLY RETURNS TO LOCKED POSITION



POWER TILTING AGITATOR

PRICE LIST ON APPLICATION - GENEROUS H.P. TERMS AVAILABLE

"SIMDINE", CHELSEA STREET, NOTTINGHAM.

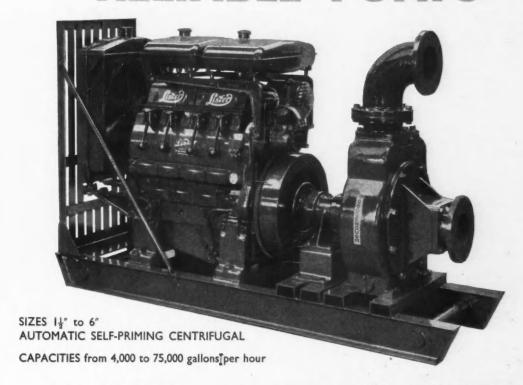
TEL: 77731

PUMPIRE LTD

FOR THE

HIRE

RELIABLE PUMPS



PROMPT & DEPENDABLE SERVICE

ATTRACTIVE HIRE RATES

Full information and details sent immediately upon request.

PUMPIRE LIMITED

Head Office: II2 Jermyn Street, London, S.W.I

Telephone: TRA 2663

MANCHESTER DEPOT GUIDE LANE **AUDENSHAW** Phone: DENTON 4195

OYSTER LANE BYFLEET SURREY Phone: BYFLEET 4401 FINCHLEY & FROGNAL GOODS YARD FINCHLEY ROAD N.W.3

Phone: TRA 2663

NOW! YOU GET

MOREPROFI

with the new FOWLER



PER VD

With its rugged unit construction and proved higher work output per engine horse-power, the new 65 b,h.p. Challenger 22 is giving a "new look" to crawler earthmoving. Powered by the high efficiency Direct Injection LEYLAND 350 Industrial Diesel, the Challenger 22 with its precision ground gear train gives a maximum pull of 18,000 lb. at the drawbar. Six forward and four reverse speeds, matched to the high torque output of the power unit, give a wide operating speed range of maximum pulls in each gear. Forward speeds of 1.4 to 6.6 m.p.h. All dozing under average conditions is done at 2 m.p.h. in second gear!

CHALLENGER 22

High engine torque characteristic and power train efficiency ensure outstanding performance in all gears.



Matched Marshall Dozer from the fabrication shops of the world-renowned plant of Marshall of Gainsborough. Correct blade curvature gives super roll action.

Reserve emergency low gear for extra heavy duty, rock spotting, etc.

Rugged deep section fully cross braced hull—withstands maximum dozer shock. Track suspension INDEPENDENT of final drive.

100% unit construction for easy maintenance means more time on the job.

Full range of matched ancillary equipment.

Why not see for yourself how it pays to buy CHALLENGER? A demonstration will be gladly arranged on request.

The Challenger range of tractors is made by John Fowler & Co. (Leeds) Ltd., and is distributed in the U.K. by

THOS. W. WARD LTD

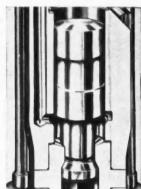
ALBION WORKS, SHEFFIELD. PHONE: 26311

London Office: Brettenham House, W.C.3.
Phone: TEM 1515



there are THREE reasons for Joy SUPERFORMANCE

CONTROLLED AIR CUSHIONINGensures that the Speedline piston never strikes the front head. A cushion of air absorbs the blow, eliminating the jarring shock and vibration that encourage wear and breakage. Precise porting, timing and metering of this air cushion by the DUAL VALVE ensures that piston momentum is absorbed only after it has delivered full impact to the drill steel. In addition to reducing wear and maintenance costs, 'controlled cushioning 'provides smooth operation and easy handling.



a Joy-Sullivan patent, extracts more work from the same air. Independent valves feed exact quantities of air to front and back of piston at precisely the right moment for maximum efficiency. Thus with positive air control on both power and return strokes, DUAL VALVE brings exact 'cushion control' to Speedlines. Metering areas make no contact and are unaffected by wear. End seating ensures long valve lift and efficient action under all operating conditions.

CADMIUM PLATING produces a superfine finish on cylinder and piston walls—permits exceptionally close tolerances for high mechanical efficiency, without danger of scoring. Under pressure and frictional heat, the plating breaks down to Cadmium Oxide, which acts as a lubricant to moving parts. Cadmium-plated Speedlines will not support rust or corrosion: thus there are no starting difficulties—even after lying idle over long periods.

THREE major features make Speedline paving breakers top priority with contractors and municipalities throughout Britain. And Joy engineering offers bonus benefits too. Sleek exterior design for easy handling—elimination of vulnerable side-rod springs—perfect alignment and reduced wear from

AIR POWER SUPPLIED & APPLIED BY

POWER AIR DIVISIO

LOOK INTO

booklet AD/8 for full technical information on Speedline Paving Breakers Joy's hard-hitting answer to construction and demolition problems.

JOY-SULLIVAN LIMITED, AIR POWER DIVISION, 7 HARLEY STREET, LONDON W.1

Telephone: LANGHAM 7711

★ Further Classified Plant Advertisements on pages 757-764

PLANT AND MACHINERY WANTED-FOR SALE-FOR HIRE

SLOGGETTS (ENGINEERING) CO., LTD.
COMPRESSORS: TRACTORS: DINKUM DIGGERS:
DOZERS: CALFDOZERS: CRANES: ROAD ROLLERS:
FLOOR CENTRES: ACROW PROPS: PAINTS PRAYERS:
MOBILE SITE OF TESTON, LIST and Heavy Secwit,
ROADFORMACTORS' PLANT, long or short chire.
I CONTRACTORS' PLANT, long or short hire.
2 Burtons Road, Hampton Hill, Middlesex,
Telephone: Teddington Lock 1138/9.

FOR SALE OF HIRE.
CP600 Rotary COMPRESSOR, with Rolls-Royce
Diesel Engine, May, 1959.
CP500 Reciprocating COMPRESSORS, with Ruston
Diesel Engines, pneumatics, 1943/55 machines,
DOUGLAS HIRE CO., LTD.,
Greenhough Road, Lichfield, Staffs.

WILL EXCHANGE Onions WINCH, Model No. 12. Mk.II. Serial No. 1107 (1954), as new, for he Tourneau WINCH for fitting to Series SR Caterpillar D6.—J. MAUNDERS AND SONS, LTD., SS4 Barton Road, Stretford. URMSton 3266.

Caterpillar D6.—I. MAUNDERS AND SONS. LTD., 554 Barton Road, Stretford. URMSton 3266.

DELMAG Diesel PILE HAMMERS.

Models D5, D12 and D2 the with rope suspended leaders and leg BUDLEY VALE. LTD., 3 Buckingham Place. London, 5.W.1. Tel.: VIC. 0252.

FOR SALE, new and used Bristol Diesel CRAWLER TRACTORS, with Angledozers, Loading of the CRAWLER TRACTORS, with Angledozers, Loading of the CRAWLER TRACTORS. WITH ANGLED CERT. Telephone 6651.

REMEMBER that PLANT SALES, LTD. have the hnest fleet of Heavy-duty Lima CRAWES for HIRE. Consult them about your craneage problems. SC castlereagh St. London, W.1. PADdington 2665/5.

FOR HIRE in the Midlands. 10-ton Lorry.

FOR HIRE in the Midlands. 10-ton Lorry mounted CRANES, Jibs to 75ft.—L. NELSON AND CO., LTD., Lugtrout Lane, Solihull, Warwickshire. Telephone: Sheldon 4005.

CONTRACTORS' PLANT IND LOW LOADING VEHICLES OF ALL TYPES

AND SIZES

A.E. FARR (Plant Hire) LTD

WESTBURY . WILTS . Tel: 358 (5lines)

NEAGRON (CONSTRUCTION), LTD.

OFFER FOR MIRE:

NEALS QM 4/6-ton POPER FOR MIRE:

NEALS QM 4/6-ton MOBILE CRANES, Jibs from 24/60ft, heavy-duty pneumatics.

NEALS 2-ton MOBILE CRANES, mounted on pneumatic tyres or crawler tracks.

NEALS 2-ton MOBILE CRANES, mounted on pneumatic tyres or crawler tracks.

NEALS 2-ton MOBILE CRANES, mounted on CRANES, 24ft. Channel to 40ft. Lattice Jibs, with JONES Super 40 3-ton capacity CRAWLER-MOUNTED CRANES, with 30ft. and 40ft. Jibs.

CRANES, with 30ft. and 40ft. Jibs.

COLES and LORAIN 5/25-ton capacity LORRY-MOUNTED CRANES.

IMA 802. 30-ton capacity CRAWLER-MOUNTED CRANES.

IMA 802. 30-ton capacity CRAWLER-MOUNTED First-class condition.

CONCRETE MIXERS, 5/3½-, 7/5, 10/7, 14/10 and 21/14 cu. ft. capacity, Diesel-powered, high or standard discharge, with Integral Weighgear and James Scrapers.

DIM 802. 30-ton Capacity Diesel-powered, high or standard discharge, with Integral Weighgear and James Scrapers.

DIM 803. Server-mounted and Portable, with full equipments.

ANT QUEEN Diesel MOBILE HOISTS, 7/10cwt. Capacity, and server serv

Abbey House, Victoria Street, London, S.W.1. Telephone: ABBey 5152 (4 lines).

FOR SALE, two Super C Le Tourneau
D'esel Motor SCRAPERS, fitted Cummins Diesel
Engines, fit for service, with good tyres. £750 each.
HARFORD ENGINEERING CO., LTD., Whiting
Road, Norwich.

FOR SALE

Lima 2400 EXCAVATORS, with Dragline and Forward Shovel. Choice of four.

Marion 111 M EXCAVATORS. Choice of two.

Lima 1201 EXCAVATORS. Choice of two.

Ruston 100B EXCAVATOR D, Disel/Electric.

All machines in excellent condition, may be seen working, and are open to any inspection and trial. Immediate delivery.

Call, write ex "ohone:

Call, write er 'phone: A.R.C. MOTOR CO., LTD., Redhill Works, Arnold, Nottingham. Tel. 26-3331/5.

NEAL'S (PLANT HIRE) L'D SERVE THE SOUTH

Immediately available for hire on the South Coast:—

Excavators, Tracto-Shovels, Mobile Compressors, Fergusons, Mobile Cranes, 10 BD 3 c.y. Diesel Dumpers, Petrol and Diesel Rollers, Concrete Mixers, etc., etc.

All enquiries promptly dealt with Chichester 3777-8-9 Phone -

P L A N T F O R S A L E.
Three 2-Tool Diesel driven Atlas COMPRESSORS,
2225 each.
One 2225 each.
One 2425 each.
One 2410 Winget Diesel MIXER, 255.
One 1410 Winget Diesel MIXER, 255.
One 1017 Rex Petrol MIXER, £50.
Two Warsop BREAKERS, Mark \$7. portable, Petrol Operated, £70 each.
One Operated STO each.
One Oper

FOR SALE OR HIRE
Bristol OVERLOADERS and BULLDOZERS, new
and reconditioned.
Barford DUMPERS and MIXERS.
Portable Diesel AIR COMPRESSORS.
C. AND A. PLANT SERVICES, LTD., 202-212 Heald
Grove, Rusholme, Manchester, 14. Tel.: RUS. 7291.

Grove, Rusholme, Manchester, 14. Tel.: RUS. 7291.

LEBHERR TK14 TOWER CRANE, lift 39cwt. at 16tt. 3in. radius and 16i-cwt. at 52tt. Jules electric TOWER CRANE, lift 50cwt. at 19vic. 16 decirity TOWER CRANE, lift 50cwt. at 19vic. 16 decirity TOWER CRANE, lift 50cwt. at 19vic. 16 decirity 10 dec

Court Road, London, W.1. Langnam 7035/3.

FOR SALE, Several Miles 2ft. gauge LIGHT RAILWAY, Points, Turntables, Bends, etc., with or without Steel Sleepers, 20 Sided-trucks 16ft. long. Locos. (Ricardo Diesel Engine).—SHELTON, Bulby, Bourne, Lincs. Tel.: Edenham 223/4.

ROAD MACHINES Double Bucket SWING WEIGHERS, in excellent order.—W. V. DAVIES, Shipston-on-Stour. 'Phone 125.

CHAIN SAWS FOR HIRE

One man or two man operated Electric, Pneumatic or Petrol Telephone: AMBassador 3456 ACROW (ENGINEERS) LTD. 8 South Wharf, Landon, W.1.

ABELSON

ROLLOVER SKIPS

1 cu. yd. capacity



Prices and details from:

ABELSON - & CO. (ENGINEERS) LTD.

SHELDON · BIRMINGHAM 26 Phone: SHEldon 2424 (10 lines) Grams: ABELSON, BIRMINGHAM ALSO AT LONDON & MANCHESTER

SOLE DISTRIBUTORS A IN 111 COUNTIES AND SONS LTD HATFIELD PEVEREL 311 (Night 319) TRADE SUPPLIED SERVICE -SALES SPARES

Ruston Bucyrus $\frac{3}{8}$, $\frac{5}{8}$ and $\frac{3}{4}$ cu. yd, all equipments.

TOTtenham 0401 (10 lines)

DUMPERS

£175

£2,500

10s.

THE

GRENHAM

Offer from stock

DOWN ENS	
15cwt. Benford, Petter Diesel, excellent condition	£175
15cwt. Liner Roughrider, Petter Diesel, excellent	6177
condition	£175
CONCRETE MIXERS	
5/3½ Blaw Knox, Ruston Petrol on two pneumatic wheels. Excellent condition	£90
7/5 Benford, Tilting Drum, Hopperfed, Petter Diesel, overhauled	£195
10/7 Stothert and Pitt, Petter Diesel, good working order	£95
10/7 Stothert and Pitt, Lister Diesel, very good condition	£195
10/7 Rex, Rotary Drum, Hopperfed, water tank, Ruston IVTH Diesel. Excellent condition	£250
14/10 Rex, Rotary Drum, Hopperfed, water tank, Ruston IVSH Diesel. Reconditioned. Choice of six	£300
14/10 Rex, as above but High Discharge. Choice of three	£325
14/10 Rex, electric motor, 400-440/3/50, Complete with integral weighgear	£475
21/14 Stothert and Pitt, Lister Diesel. Low discharge. Excellent condition. Choice of two	£350
CONCRETE PLANT	
14 cu. ft. Road Machines Double Bucket Swing Weighbatcher, overhauled and repainted. Choice	
of four	£165
10-ton Portasilo, good condition. Repainted	£275
30-ton Portasilo , rectangular discharge hopper, good condition, repainted	£375
Allam Poker Vibrators, electric, c/w flexible drive and Poker head. Very good condition. Choice of twoeach	£25
Vibrosoil Compactors, J.A.P. Petrol, very good	200
order each	£125

MONO-RAIL EQUIPMENT

We have a large selection of Mono-Rail equipment in excellent condition. Power and trailer wagons, straight and curved rails, stands. Supplied in complete sets or as required.

PUMPS

2in.	Alcon,	Petrol	Engine,	good	condition	 £25
3in.	Sykes 1	Petrol, 1	ift and	force i	model	 £1:

6in. Sykes Diesel, centrifugal	£50
3in. Hand Pump	£2
Vac-Seal Centrifugal Pump by International Com-	
bustion, Ltd. Capable of handling heavy proportion of solids. New 1954, electric, 400-440/3/50.	

HOIST

noists	
A.C.E. and B.H.C. Scaffold Hoists, Petrol Engine, very good conditioneach	£55
5/7cwt. Warry J.A.P. Petrol, two pneumatics	£45
7/10cwt. Wickham Static, Petter or Ruston Diesel, complete with Masts, first-class order	£125
10cwt.Wickham Static, Ruston Diesel, complete with Masts. Choice of three machines. Excellent	
condition	£145
15/20cwt B.H.C. Centre Slung Petter Diesel over-	

First-class condition

15/20cwt. B.H.C. Centre Slung, Petter Diesel, overhauled, complete with Hopper	£295
One 1958 A.C.E. 20cwt. Passenger Hoist— "Skymaster" Serial No. 15258/23644. Includes	
eight x 18ft. Mast Sections and six electrically controlled gates. Fitted 15-man cage. Now	
erected in London, E.C.2, the hoist can be seen in operation until end of January	£2,500

TRACTORS AND SHOVELS

D8 Caterpill				
Hydraulic Bu				
Bray Loader	1953,	Fordson	Diesel,	

Loade	er, mrs	t-class condition	20/
Bray	BL25	tracked Loading Shovel, September,	
1956,	1 cu.	yd. Bucket. First-class condition	£1,750

CRANE

Buildmaster	60/150	Tower	Crane,	new	1953.	
Standard cu						
electric drive						
degree slew i	n either	direction	. In go	od cor	ndition	£1,500

MISCELLANEOUS

Parma	nco	hori	zontal	and	vertical	mobile	drill,
Series	705	85.	Ford	V.8	Petrol.	Comp	letely
overha	uled.	0	ffers.				

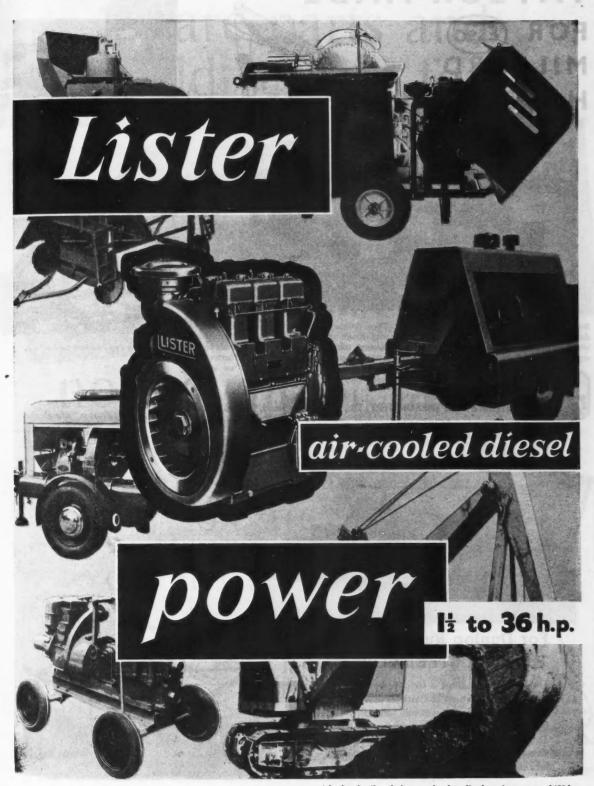
OVE	erhaule	d. O	ffers.					
							first-class	-
cor	idition	and re	epainte	d			each	£2
Op	perman	Mo	tocart.	hand-ti	ilting	tvi	e. I.A.P.	

GREENHAM EQUIPMENTS LTD.

CLAYTON ROAD, RUISLIP ROAD, GREENFORD, MIDDX.

Let's ring VIKING 3651





Ask for details of these and other diesel engines up to 1450 h.p.

R. A. LISTER & CO. LTD. Dursley, Gloucestershire Phone: 2371

Telex: 43230. Telegrams: Machinery Dursley

London Office: Imperial House, Kingsway, W.C.2. Phone: Temple Bar 9681

TAYLOR-MADE



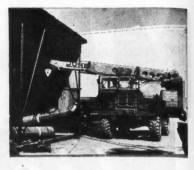
Striking exidence of Jumbo's versatility is the day-to-day work handled by four 4-ton four wheel drive Taylor Jumbo slewing cranes supplied to Esso Petroleum Company for their

refinery now being built at Milford Haven, Pembroke.

These unique cranes were designed to operate over rough terrain and have power assisted steering, telescopic jib, fully sprung chassis and a comprehensive specification. Leaflet series 42 is packed with information—may we send you a copy?

DESIGNERS & MANUFACTURERS

F. TAYLOR & SONS (MANCHESTER) LTD., 142, Bolton Road, Salford 6, Lancs.





Photos courtesy Esso Petroleum Co. Ltd.

Telephone: Pendleton 1341/3/4
Telegrams: "Efftayson" Manchester



For Dunlop Rubber Co. Ltd., TUBULAR STEELWORK

The illustrations show a factory, built for the Dunlop Compositions division at Castle Bromwich.

The Lubular steelwork was site welded by Tubewrights Ltd., and the nine bays, each 90 ft. x 40 ft.—an area of 32,000 square feet—were lifted into position in 3 days. Photographs by courtesy of Dunlop Rubber Co. Ltd., Architects S. Bentley, Esq.



TUBEWRIGHTS LTD

CORPORATION ROAD, NEWPORT, MONMOUTHSHIRE

Telephone: Newport 72231

A SUBSIDIARY OF STEWARTS AND LLOYDS LIMITED



Spare parts and field service for

ALLIS-CHALMERS and FLAT

EARTH-MOVING EQUIPMENT

and the

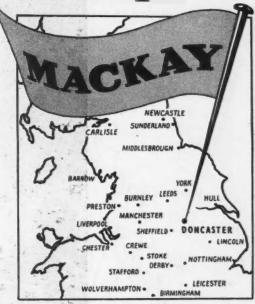
DAC 130 COMPRESSOR

now available at the new Doncaster depot

> ON SITE SERVICING CARRIED OUT BY MACKAY FIELD ENGINEERS

MACKAY INDUSTRIAL EQUIPMENT LTD.

Wheatley Hall Road, Doncaster, Yorkshire Telephone: Doncaster 66353. Telex 5667 Telegrams and Cables: Macagencies Don Telex



FOR SERVICE AND SUPPLY DEAL WITH MACKAY

MACKAY

of Feltham

MACKAY INDUSTRIAL EQUIPMENT LTD., CENTRAL WAY FELTHAM, MIDDX, (FELTHAM, 3435)



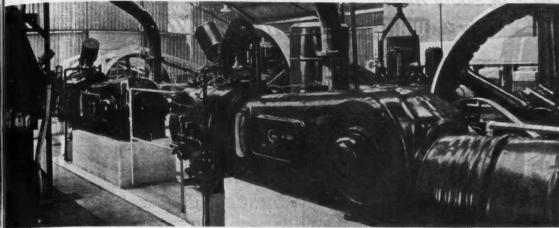
Many Consolidated Pneumatic "Power Vane" portable rotary air compressors are in service at His

At Hinkley Point Atomic Power Station

Pequipment is working



Difficult conditions for drilling, but all in a day's work to the Consolidated Pneumatic G-800 Tracdril, shown drilling 4 holes to 40-ft in hard shale and limestone to clear a channel for the floating caisson.



The main compressor house carries an installation of Consolidated Pneumatic Class "T" Stationary Compressors for low pressure air.

hard for Taylor Woodrow...

Wherever big construction projects are going on, invariably CP air compressors and power tools will be found hard at work on the site. A good example of this is to be seen at Hinkley Point Atomic Power Station which is being built for the Central Electricity Generating Board by The English Electric, Babcock & Wilcox, and Taylor Woodrow Atomic Power Construction Company Limited. The civil engineering contractors, Taylor Woodrow Construction Limited are using a big proportion of CP equipment for every type of duty, not only to save time and man-power but also to maintain their high standards. These pictures will illustrate the complexity of operations being carried out a Hinkley Point. The excellent progress achieved by Taylor Woodrow reflects in some measure the efficiency of the CP equipment they have chosen for this work.



The floating caisson being towed and to its location at the seaward end of the tunnel. Three Consolidated Pneumatic "Power Vane" rotary compressors were installed in the existen



A CP pneumatic chain saw proves a great time saver in the many timber construction jobs occurring on a be contract.



Removal of water is a frequent problem an contracting work. The rugged CP-77 Sludge Pump can be relied upon for continuous duty in the roughest conditions,



Consolidated Pneumatic

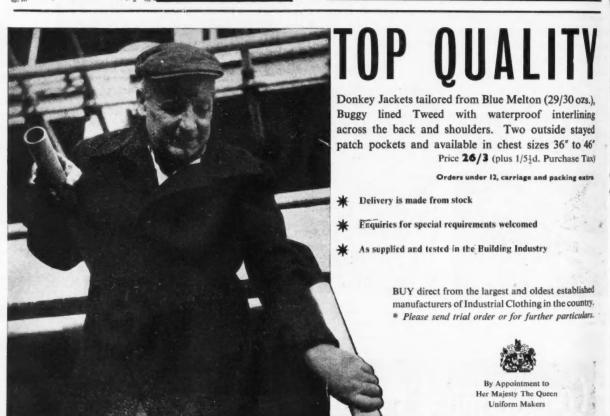




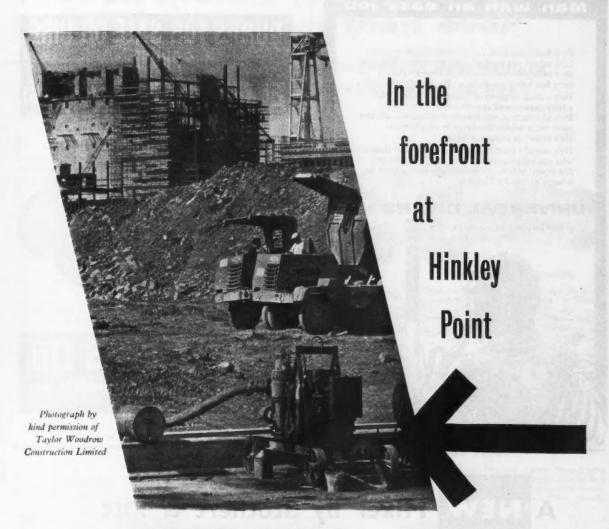
(Open until 5 o'c. on Seturdays)

J. COMPTON. SONS & WEBB, LTD. 404-422, Old Ford Road, London, E.3 Telephone: ADVance 1961 (6 lines)

D. MULLARD & CO. LTD. Station Road, Edgware, Middr. EDG. S574



Obtainable only from:





UNIVAC PUMPS

HENRY SYKES LIMITED

53b Southwark Street, London, S.E.I.
Telephone: Hop 5231 (8 lines)
Telegrams: Tripulse, Sedist, London

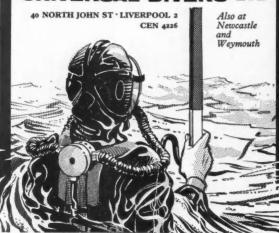
In the construction of the world's largest atomic power station by The English Electric, Babcock & Wilcox and Taylor Woodrow Atomic Power Construction Co. Lt 1, Univac pumps have been in constant use since the outset. These self-priming unchokeable centrifugal pumps were employed during the construction of the 3,500 ft sea wall, work which was carried out under tidal conditions. Univacs were also used for ballasting the floating caisson and in the construction of the outfall. At Combwich, where a wharf was built for unloading heavy machinery, Univacs were used for jetting slurry, for which they were particularly valuable because of their ability to handle 50% or more solid content. The Univac pumps in use at Hinkley Point are of 4", 5" and 6" sizes.

Man with an easy job

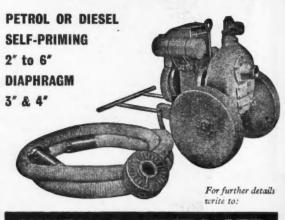
He's lucky this week...he's only chilled and stiff. Last month was tougher; then he crawled fifty yards up a twenty-four-inch sewer to clear a valve... forty feet below the surface. He doesn't scare easily. He's a crack frogman of Universal Divers. He's a fully-experienced oxy-arc welder and cutter. He's also been an underwater stonemason. He can carry out a submarine survey in nil visibility. He's skilled in using explosives.

He's one of a team of Universal divers and frogmen who can report anywhere in the British Isles at a few hours' notice. Next time you need a diver in a hurry—send for Universal.

UNIVERSAL DIVERS LTD



PUMPS FOR SALE OR HIRE PHONE: ELGAR 6757 (4 LINES)



LEWIS & LEWIS LTD

SCHOOL RD., NORTH ACTON, LONDON, N.W.10



Proven money-makers for years ...now better than ever

LW equipment improved; new haulers and 6-wheel scraper added to line

When is the last time you looked at new LeTourneau-Westinghouse earthmoving machines? If more than a few months ago, you no longer have the full story on how these improved machines can increase your production and help reduce your costs!

Through the years, LW Tournapulls, Rear-Dumps, graders, and tractors have proved profitable for their owners. And through a continuous program of product development these pioneer machines have been constantly improved. Greater power, bigger capacities, faster speeds, have characterized this development, and today the LW "line" offers outstanding advantages which you should investigate.

In addition to the introduction of a 360-hp B Tournapull and a 270-hp V-engine "C", LeTourneau-Westinghouse has added two important *new* machines: the Haulpak truck, and the 37.7 mph, 20 yd 6-wheel Speedpull. You will find this modern line of LW earthmovers much to your satisfaction.

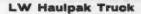


Tournapuli Scrapers

Self-powered rubber-tyred scrapers with 28 yd, 20 yd, and 9 yd heaped capacities; 360, 270, 143-hp diesel engines; speeds up to 54 kph. Rugged Rear-Dump trail units, interchangeable with scrapers, are available in 11, 22, 35 ton capacities.

Tournatractor

218-hp rubber-tyred tractor drives over highways or cross-country at speeds to 17 mph; accomplishes twice as much work as crawlers on 85% of your pushing, pulling jobs.



22, 27, and 32 ton capacities with engines of 320, 335, and 375 hp. These rugged trucks haul up to 30% more than their own weight, need no springs because they ride on Hydrair suspension. They make non-stop U-turns in far less space than conventional trucks and lube check of just 4 grease fittings is needed only at 500-hr intervals. Many parts interchangeable.



80, 115, 123, and 160-hp LW graders have 8 forward speeds, 4 reverse speeds and 3 optional extra-slow creepers; 145 and 190-hp models are equipped with torque converter. 67-hp model also available.

LW Speedpull

This six-wheel scraper gives you excellent performance on long-haul assignments. Speedpull has 276 hp, 20 yd heaped capacity, 37.7 mph speeds, best power-to-weight ratio, Hydrair suspension and many other LW advantages.





Hydrair-Trademark; Tournatractor, Tournapull, Haulpak. Speedpull-Trademark Reg. U.S. Pat. Off. LA-2210-DC-1cj



JACK OLDING

HATFIELD · HERTS

Telephone: HATFIELD 2333

JACK OLDING & CO. (SCOTLAND) LTD., Coupar Angus, Perthshire



LeTOURNEAU-WESTINGHOUSE COMPANY Export Division, Peoria, Illinois, U.S.A. § Subsidiary of Westinghouse Air Brake Company.



Things looking up?

Business grows. Add a new

And grows and grows. Add a couple more.

Sounds simple—till you start wondering where the money's coming from.

That's where UDT comes in. UDT helps you replace old equipment, add new, out of income. Which often means it pays for itself out of increased profits.

A nice businesslike way to do business.

If you think UDT could help you, get in touch with the Manager of your nearest UDT office—the address is in your local directory.

United Dominions Trust (Commercial) Limited

United Dominions House, Eastcheap, London EC3



THE OLDEST ESTABLISHED ROAD FORM MANUFACTURERS

PATENTEES OF THE FAMOUS

RETRACTABLE CAPTIVE DOWEL LINK CONNECTION

SOLE DESIGNERS OF THE SPECIAL HAUNCHING FORMS

LONDON-YORKSHIRE MOTORWAY

Sole Agents in United Kingdom for Kelvin Pathfinder Steel Roads Forms, Compactors Engineering Ltd., Lockfield Avenue, Brimsdown, Enfield, Middx.

JAMES GRUNDY & CO. LTD., KELVIN STEELWORKS, ST. HELENS, LANCS.
Tel: ST. HELENS 3004.

The PARKER PLOW-MIXER

Doubles output Gives the fastest mix-10 cu. ft. in 30 seconds!

for mixing concrete ... designed with a NEW MIXING ACTION

> WILL MIX USUAL CONCRETE MIXES SEMI-DRY MIXES LEAN MIXES STABILISED SOILS

14 CU. FT. IN - 10 CU. FT. OUT

Write for Publication 594 - see how Parkers solve today's mixing problems. 'Power-scoop' Loading and Weigh Batching equipment are available.

FREDERICK

LIMITED

VIADUCT WORKS LEICESTER

PHONES: LEICESTER 62531 (10 LINES)

LONDON : STAFFORD HOUSE, NORFOLK STREET Depots at London, Cardiff, Sedgley (nr. Wolverhampton), Leeds and Glasgow.



ELIMINATING FLEXIBLE SHAFTS

A size of Vibrator and Generator to suit the smallest and largest Contract

AN ALL-BRITISH MACHINE

OUTSTANDING ADVANTAGES

LIGHT BUT VERY POWERFUL . NO FLEXIBLE SHAFT YET EXTREME FLEXIBILITY IN OPERATION . SAFE LOW WORKING VOLTAGE FREQUENCY OF 12,000 R.P.M. COMBINED WITH LARGE AMPLITUDE PROVED EXCEPTIONALLY HIGH COMPACTION OF VERY HARSH MIXES · VIBRATORS CAN OPERATE OVER 200 FEET AWAY FROM GENERATORS

AVOIDING MOVEMENT OF HEAVY EQUIPMENT

Now available with hand tools—comprising Grinders/Sanders/Circular Saws/Chain Saws/Plas Only 4-Core Cable between Vibrator Switch and Generator

Send for further details of the full range :

E·P·ALLAM

E · P · ALLAM & CO. LTD.

132-135 SLOANE STREET. S.W.I. - TELEPHONE: SLOANE 9976 (5 lines)
SCOTLAND: 39 CAVENDISH STREET, GLASGOW, C.S. TELEPHONE: SOUTH 0186

STRANGFORD, LTD., Beifast and Dublin A. GUNN AND CO., Altriacham, Chashire. O. L. DAVIES, Port Talbot, Glam. J. LEWIS (MACHINERY), LTD., Burslem. Stoke-on-Trent. G. B. CORNER AND SONS, Leeds and Nottingham.
JOHN ROULSTONE, LTD. Stranger Type.

Tyne, R. SELWOOD, Chandler's Ford, Hants.

Yesterday's Forecast... - TODAY'S HAZARD





get a BRISTOL on the job ... but fast!

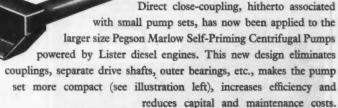




H. A. SAUNDERS LIMITED

INDUSTRIAL TRACTOR DIVISION
836-842 HIGH ROAD, NORTH FINCHLEY, LONDON N.12
Tel: HILlside 5272 (8 lines) Grams: Dutrax, London N.12





Pegson Marlow Pumps are just the job if you require a compact, highly efficient, dependable unit-and, of course, all those features that make Pegson Marlow a first choice in pumps are still retained. Write now for full details.

MARLOW Self-priming centrifugal pumps

Built within the Bentley Group by

PEGSON LTD., COALVILLE, LEICESTERSHIRE Telephone: Coalville 1234 (10 lines)

London Office: Iddesleigh House, Caxton Street, S.W.I. Tel: Abbey 2373
Scottish Office: 7 Lister Road, Hillington Industrial Estate, Glasgow. Tel: Halfway-1800

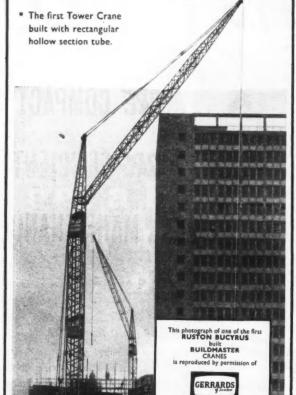


-Still ahead

British built by



THE CRANE OF ADVANCED DESIGN *



Buildmaster Tower Cranes are being batch produced in the RUSTON-BUCYRUS works at Lincoln for delivery in the spring of 1960

DEMAND IS ALREADY HEAVY-ORDER NOW TO MINIMISE DELAY

ENQUIRIES TO :-

ABELSON

& CO. (ENGINEERS) LTD.

Tel: SHEldon 2424 (10 lines) grams: Abelson, Birmingham

SHELDON-BIRMINGHAM 26

London Office: 60:62 Clapham Rd | Manchester Office: 100 Oxford Rd London, S.W.9 Tel, RELiance 7081 | Manchester, Tel, ARDwick 1328



PERSONNEL ADMINISTRATION LIMITED MANAGEMENT CONSULTANTS

Our Appointments Division has been asked to advise on the following posts:—

GENERAL MANAGER Civil Engineering Contractors

for a well-known Civil Engineering contracting organisation with headquarters in the Home Counties. He will be responsible for the direction and administration of the Company's activities throughout England and Wales. Starting salary up to £3,000 with company car and contributory pension. Future financial prospects for a successful man are attractive, and early appointment to the Board is envisaged. Applicants, between the ages of 40 and 45, should hold a professional qualification in civil engineering and have wide management experience in the contracting field. (Ref. 3353/CJ)

CONTRACT CONTROL ACCOUNTANT Civil Engineering: Iran

for an American consulting engineering organisation carrying out extensive construction work in South-West Iran. He will be responsible to the Project Engineer for the control and recording of costs and quantities on a major hydro-electric scheme. Applicants should be aged 25-40, and must offer a minimum of six years' on-site contract control experience and a thorough knowledge of construction materials. Ability to speak Italian would be a great advantage. Starting salary up to £2,300 including allowances. Free first-class travel to Iran and during leave periods. (Ref. 3349/CI)

GENERAL MANAGER

Engineering: Surrey

for a firm manufacturing a variety of machinery and equipment for public authorities and the contracting industry. The Company is a subsidiary of a well-known group and is located in a pleasant Surrey town. Applicants should be aged 35 to 40, A.M.I.Mech.E., and have substantial experience of production management in this or an allied industry, preferably preceded by relevant design experience. Starting salary around £2,000, plus contributory pension. There are excellent prospects of promotion to Board level. (Ref. 3354/CJ)

LONDON REPRESENTATIVE

Building and Civil Engineering

for a soundly based provincial company engaged on industrial, local authority and Governmental work in various parts of the United Kingdom. Existing contacts with Government departments, architects and consulting engineers in the London area, hitherto handled by directors, will be handed over for further development. Candidates, between 40 and 50, should have broad experience of the industry rather than specialised qualifications; a good personality is essential and evidence of existing contacts would be welcome. The starting salary will be around £1,750. (Ref. 4356/CI)

The identity of candidates will not be revealed to our clients without their prior permission.

For the convenience of clients and candidates we have Regional Offices in Glasgow, Manchester and Birmingham but, in the first instance, applicants should forward brief details, quoting the reference number, to:—

> PERSONNEL ADMINISTRATION LIMITED APPOINTMENTS DIVISION 2 ALBERT GATE, LONDON, S.W.I.

ROYAL COUNTY OF BERKSHIRE. RECONSTRUCTION OF BROAD LANE (PART).

BOROUGH OF MAIDENHEAD.

SEWAGE WORKS EXTENSION—STAGE II.

CONTRACT NO. 3.

The COUNCIL invites TENDERS for the CONSTRUCTION of FOUR SSIT. dia. REINFORCED CONCRETE ANNAS; FOUR 100th. dia. PILTERS; a pUMPING STATION CREETE PLANT OF THE PROPERTY OF THE

Judio documents.

Tenders. in plain sealed envelopes endorsed "Sewage Tenders. in plain sealed envelopes endorsed "Sewage Works Extension—Stage II, Contract No. 3." and bearing no mark or indication of the sender, must be delivered to me not later than Noon on THURSDAY, 10th March, 1960.

The Council does not bind itself to accept the lowest or any other Tender.

STANLEY PLATT.

Town Clerk.

Guildhall, Maidenhead, Berks. January, 1960.

BEDWORTH URBAN DISTRICT COUNCIL. EXHALL INDUSTRIAL SITE-CONTRACT NO. 2.

ROADS AND SEWERS-STAGE I.

Tenders are invited for CARYING OUT the WORKS, which comprise the FOLLOWING:

(i) Roads with Fonotnaths, Kerbs and Surfacing:
(a) 24ft. Carriageway, approx. 280 lin. yd.
(b) With Kerb Foundation and Road Base only, 24ft. and 18ft. Carriageway, total length approx. 610 lin. yd.
(c) Hardcore Access Road, 12ft. wide approx. 215 lin. yd.
(d) Supprox. 215 lin. yd.
(ii) Sewers:
(ii) Sewers:

(d) Street Lighting and other ancillary Works.

(ii) Sewers:

(a) Foil Water Sewer—Gin.-12in. dia. Salt Care Water Sewer—Spun-Concrete Pipe, maximum size 36in. dia., approx. 1,050 lin. yd., complete with Brick and Precast Concrete Manholes.

(iii) The experience of Surface and the Mainment of the Works for a period of 12 months. of the General Conditions of Contract. Specification, Bill of Quantitles. Drawings and Form of Tender may be obtained from SIR HERBERT HUMPHRIES AND MCDONALID. Consulting Engineers, with the presence of the General Conditions of the Consulting Engineers. Consulting Engineers (which will be returned on the receipt of a bona-fide Tender, not subsequently withdrawn), and the return of all documents and Drawings. Cheques must be made ayable to Bedworth Urban District Council.

Particulars of the proposed works can be appected 5 p.m., Monday to Friday inclusive, at the Offices of the Consulting Engineers, and at the office of the Engineer and Surveyor. Council Offices, Bedworth. Information concerning the Drawings and documents and only be obtained from the Consulting Engineers.

Of Quantific Engineers, and at the office of the Engineer and Surveyor. Council Offices, Bedworth, not later than Noon on MONDAY, 14th March, 1960. Tenders and/or documents received after that time will not be considered. The Council Offices, Sedworth, not later than Noon on MONDAY, 14th March, 1960. Tenders and/or documents received after that time will not be considered.

S. G. DEEMING, Clerk of the Council.

WARWICK RURAL DISTRICT COUNCIL. SHREWLEY SEWERAGE AND SEWAGE DISPOSAL SCHEME.

CONTRACT NO. 12.

TENDERS are invited for the LAYING of 3½ miles of 9in. and 6in. SALT-GLAZED WARE SEWERS with CONCRETE TUBE MANHOLES and the CONSTRUCTION of an EJECTOR STATION and of SEWAGE DISPOSAL WORKS. comprising Reinforced Concrete Settling, Digestion and Humus Tanks, Biological Filters, Studge Drying Beds. Works Pumping Station and Site Roads. Pipelines and Fencing.

Hatton Junction, Jour miles west of Warwick. The General Conditions of Contract, Specification and Bill of Quantities may be obtained from the Council's Consulting Engineers, MESSRS. J. D. AND D. M. WATSON, MM.I.C.E., 67 Tutton Street, Westminster, London, S.W.1, on and after 19th FEBRUARY, 1960.

minster, London, S.W.1, on and after 1911 reminster. London, S.W.1, on and after 1911 reminster. Applications must be accompanied by a deposit Applications must be accompanied by a deposit cheque for Ten Guineas, payable to the Council, which will be refunded only to contractors who submit bona-fide Tenders and return all documents and Drawings.

Sealed Tenders must be endorsed "Tender for Sealed enders must be endorsed "Tender for Mark Indication of the Sealed and the Sealed of the Office of the undersigned not later than Noon on 28th MARCH, 1960.

undersigned not later than 1900.

The Council do not bind themselves to accept the lowest or any Tender.

T. W. H. WATKISS.

T. W. H. WATKISS.

T. W. H. WATKISS, Clerk of the Council.

Council Offices, 1 Warwick New Road, Leamington Spa. February, 1960.

CONTRACTS

BOROUGH OF ROMFORD.

LAND DRAINAGE WORKS-DAGNAM PARK.

TENDERS are invited for the CONSTRUCTION of tout 4,500 lin. yd. of 3in. and 6in. LAND DRAINS, th ancillary works, at this Site. Applications for Tender documents (accompanied needle procedue, value \$2 2s., as deposit) should be made Borough Engineer and Surveyor, Town Hall, miford.

a Cheque, which are the receipt of completed the control of the receipt of completed the closing date for the receipt of completed the control of the contro

29th January, 1960. BOROUGH OF DUNSTABLE. ANNUAL TENDERS, 1960-61.

The Council invites TENDERS for the SUPPLY of FOLLOWING MATERIALS for the year ending st March, 1961:—

the FOLLOWING MATERIALS for the year ending
31st March, 1961:—
(1) Tarmacadam (Siap Aggregate).
(2) Fine Cold Asphalt (Siap Aggregate).
(3) Concrete Aggregates.
(4) Building Sand.
(5) Ashes.
(6) Spent Ballast.
(7) Frecast Concrete Kerb.
(8) Frecast Concrete Kerb.
(9) Frecast Concrete Kerb.
(9) Frecast Concrete Flags.
Particulars and Forms of Tender may be obtained from the Borough Engineer and Surveyor at the address below.
Tenders, in a plain sealed envelope endorsed "Tenders for Materials" but bearing no distinguishing mark indicating the sender, are to be delivered to me not later than 12 Noon on SATURDAY, the 27th February, 1960.

JACK SMITH, Town Clerk.

Municipal Offices, Dunstable, Beds, 4th February, 1960. BOROUGH OF LUTON.

EAST HYDE SEWAGE DISPOSAL WORKS. MINOR CAPITAL WORKS-CONTRACT NO. 1.

MINOR CAPITAL WORKS—CONTRACT NO. 1.

TENDERS are invited for the FOLLOWING:—

(a) New 42in. dia. Pipe By-pass between Secondary Sedimentation Tanks and Aeration Tanks, approx. length 90 lin. yd.

(b) State of the Secondary Sedimentation Tanks and Aeration Tanks, approx. length 90 lin. yd.

(c) New Yalve Chamber on 10in. dia. Studge Main.

(d) Net Grit Settling Chamber for Humus Sludge.

(e) New Stored Sludge Pumping Station (capacity 200 g.p.m.), together with approx. 110 lin. Secondary Separating Tanks.

Documents from Borough Engineer, Town Hall, Luton, on payment of \$2.2 st. deposit, returnable after receitor of a bona-fide Tender, not subsequently withdrawn. Cheques payable to "Luton Corporation." Tenders to ToWn CLERK, Town Hall, Luton, by Noon, 26th FEBRUARY, 1960.

TIRBAN DISTRICT COUNCIL OF

URBAN DISTRICT COUNCIL OF

CANDLESTICK MEADOW, PANFIELD LANE.

CANDLESTICK MEADOW. PANFIELD LANE.

TENDERS are invited for the CONSTRUCTION of DADS. LAYING of KERBS and SEWERS at the BOVE ESTATE. The Work consists of the FOLLOW-GAPROXIMATE CONTROL OF THE CONTROL O

Tender, a sparately in the returned separately in the returned separately in the returned to the undersigned at the delivered to the undersigned at the february, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

W. BALSON, Clerk of the Council.

ULVERSTON RURAL DISTRICT

PROVISION OF NEW COUNCIL OFFICES.

Enquiries are invited from builders desirous of TENDERING for the CONVERSION of the DETACHED RESIDENCE known as "TODBUSK," situate at SRINGFIELD ROAD, Ulverston (North Lancashire), into OFFICE ACCOMMODATION for the ABOYENAMED COUNCIL.

A brief outline of the Work involved will be supplied in the first instance, and if the contractor should then wish to submit a Tender, the necessary documents and Drawings will be supplied.

Names and addresses must be lodged with the Names and addresses must be lodged with the February, 1960.

F. D. YOULE.

F. D. YOULE, Clerk of the Council.

Clerk's Department, Town Hall, Ulverston, Lancs.

LEEDS REGIONAL HOSPITAL BOARD. TO HEATING CONTRACTORS.

FIXED-PRICE TENDERS are invited for CARRYING OUT IMPROVEMENTS to HEATING and HOT-WATER SERVICES in the ADMISSION UNIT and TWO VILLAS at MENSTON HOSPITAL, near Leeds.

Applications for Form of Tender and Specification and Drawings, accompanied by a deposit of £2 2s. (which will be refunded on receipt of a bona-fide Tender and other Contract documents), must be made to the Architect to the Board at the undermetrioned to the Architect to the Board at the undermetrioned to the Architect to the Board at the undermetrioned to the Architect to the Board at the properties of the Conditions of the Drawings, Conditions of Tender and Conditions of Contract may be inspected.

crossed.

A copy of the Drawings, Conditions of Tender and Conditions of Contract may be inspected at the Office of the Architect to the Board, or at the Office of the Architect to the Board, or at the Office of MESSRS, E. GRIFFITHS AND SON. Consultant Engineers, Enders, Bromborough Cheshical Consultant Engineers, Engi

WM. A. SHEE, Secretary to the Board.

Park Parade, Harrogate, Yorks.

CONTRACTS

GRAVESEND BOROUGH COUNCIL.

ANNUAL SUPPLIES-1960-61.

The Council invite TENDERS for the SUPPLY uf ARTIFICIAL STONE PAVING and KERBING for the year commencing 1st April. 1960.

Forms of Tender, Specification and Surveyor, contract from Borough Engineer and Surveyor, or the surveyor of the surveyor, addressed envelope with 6d. stamp affixed or large for Annual Supplies," to the undersigned not later than FRIDAY. 19th February, 1960.

In the surveyor of the surveyor

F. W. HARRISON, Town Clerk.

OF BARNES. BOROUGH ROCKS LANE, A.306-SURFACE WATER SEWER.

ROCKS LANE, A.306—SURFACE WATER SEWER.

TENDERS are invited from experienced civil engineering contractors for the ABOVE WORKS. dia. Concrete Tube Sewer in Rocks Lane (A.306): 63 lin. vd. of 27lin. dia. and 167 lin. vd. of 24lin. dia., 90 lin. vd. of 21lin. dia. and 167 lin. vd. of 18lin. dia. in Church Road (A.3003). Barnes, together with the Construction Mamboles, and ancilled Were Construction Mamboles, and ancilled Were Construction Mamboles, and ancilled Were Construction of Mamboles, and the Construction of Mamboles and Construction of Mamboles, and the Construction of Mamboles and Construction of Mamboles, and Mamboles,

CORPORATION WATERWORKS.

FIXED-PRICE TENDERS are invited for the CONSTRUCTION of a REINFORCED CONCRETE SERVICE RESERVOIR (capacity two million gallons), and ancillary Works, at LECKWITH, near Cardin. e obtained from the Water Engineer and Manager, to whom application should be made, accompanied by a deposit of the sum of £2 2s. Cheques should be made payable to Cardin. Corporation and crossed "Mot or cardin." Corporation and crossed "Mot on receipt of the Contract documents. Tenders will not be considered unless enclosed in a plain sealed envelope endorsed. "Tender for Leckwith Reservoir." addressed to the undersigned at the City Reservoir." addressed to the undersigned at the City Reservoir in Completed Bills of Quantities are not to be submitted with the Tender Dunntus of the Water Engineer and Manager within three days after written request following the opening of the Tenders.

The Connected Bills of Quantities are not to be submitted with the Tender Dunntus of the Water Engineer and Manager within three days after written request following the opening of the Tenders.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER-JONES.

S. TAPPER-JONES,

City Hall, Cardiff. February, 1960.

CHISLEHURST AND SIDCUP URBAN

ANNUAL CONTRACTS, 1960-61.

ANNUAL CONTRACTS, 1960-61.

TENDERS are invited for the SUPPLY of the UNDERMENTIONED MATERIALS:—
Artificial Stone Kerbs.
Artificial Stone Paving Slabs.
Brown of the Supplement of the Supplemen

T. W. FAGG. Clerk of the Council.

DORKING AND HORLEY RURAL DISTRICT COUNCIL.

HORLEY SEWAGE DISPOSAL WORKS EXTENSIONS. CONTRACT NO. 4.

TENDERS are invited from experienced contractors for the EXTENSION of the COUNCIL'S HORLEY SEWAGE DISPOSAL WORKS. The Contract includes the Construction of Circular Tanks in Reinforced Concrete, Extensions and Modifications to Two Existing Pumping Stations, and Alterations to Existing Units, etc.

runsping stations, and Alterations to Existing Upitis, Contractors desirous of tendering may obtain cooles of the Form of Fender, General Conditions, Specification and Bill of Quantities from the offices of the Consulting Engineers, MESSRS. G. B. KERSHAW AND KAUFMAN, 8.2 Victoria Street, Westminster, S.-W.1, upon deposit of Five Guineas (cheques made payable to the Dorking and Horley Rural District Council). The Consulting Contract of the Consulting Consulting Consulting Consulting Consulting Engineers or at the office of MR. P. CALD-WELL, Surveyor to the Council, Council Offices. Massetts Road, Horley, any day during ordinary office. Tenders, endorsed "Tenders, endorse

hours.

Tenders, endorsed "Tender, Sewage Disposal Works Extensions—Contract No. 4," in plain sealed envelopen onto bearing any mame ur mark indicating the sender, must be delivered to the undersigned not letter must be delivered to the other blacks. The Council does not bind itself to accept the lowest or any Tender.

MAURICE RIDGERS. Clerk of the Council.

WATER DEPARTMENT.

WATER DEPARTMENT.

TENDERS are invited by the above Corporation for the SUPPLY of the FOLLOWING:—
Cast-iron Pipes and Specials.
Valves and Hydrants.
Asbestos-Cement Pipes.
Water Meters. (Cast Iron, etc.).
Surface Box Cast Iron, etc.).
In such quantities as may be required during the year ending 31st March, 1961.
Form of Tender, Schedule and General Conditions and any further information required can be obtained from the Water Engineer, 10 Church Street, Dewsbury.
Tenders, enclosed in a plain sealed envelope, endorsed render for Water Meters, or any of the other spring the strength of the sealed envelope.
A NORMAN JAMES,
Town Hall.

Town Hall, Dewsbury, 28th January, 1960. WOLVERHAMPTON COUNTY

> WOLVERHAMPTON CORPORATION WATER UNDERTAKING. HILTON WATERWORKS.

COMPLETION OF BUILDINGS.

Contractors desirous of TENDERING for the Contractors of ADDITIONAL BUILLINGS together with the Decorative Finish to an Esisting together with the Decorative Finish to an Esisting the Contract of Contract documents not later than 15th FEBRUARY, 1960, which deposit will be refunded on receipt of a bona-fined Tender not contract Contrac

CITY OF CAMBRIDGE. SURFACE WATER RELIEF SEWER

TENDERS are invited for the CONSTRUCTION of approx. 500 lin. yd. of 15in. to 27in. internal dia. SEVER. WATER SEVER, with Manholes The Connection to Existing Drainage, and the Construction of Existing Drainage. and the Construction of Existing Drainage. The Construction of Existing Drainage

March, 1960.
Tender documents may be obtained from the City Engineer. Guildhall, Cambridge, on payment of a deposit of £2 2s. (cheques to be payable to Cambridge Corporation), returnable only on the receipt of a bona-fide Tender and the return of all Drawings supplied to tenderers.

Council do not bind themselves to accept the or any Tender. ALAN H. I. SWIFT, Town Clerk.

Guildhall. Cambridge. January, 1960.

CITY BRADFORD. OF ASPHALT SURFACING.

ASPHALT SURFACING.

TENDERS are invited for the SUPPLY. DELIVERY and LAYING by MECHANICAL MEANS of approx. 37,000 super, yd. of ROLLED ASPHALT (Hot Process) on Various Roads in the City of Bradford. Forms of Tender, Conditions, Specification and Bills of Quantities may be obtained from the City Engineer and Surveyor, Town Hall, Bradford, 1, on payment of a deposit of £2 2s., which will be refunded on receipt of a bona-finde Tender and the return of all documents. In plain sealed envelopes endorsed "Asphalt Surfacing" but bearing no mark indicating the sender, should reach me not later than First Post on TUESDAY, 23rd February, 1960.

HENRY PATTEN, Town Clerk.

HOLYWELL URBAN DISTRICT COUNCIL. WATER SUPPLY.

WATER SUPPLY.

TENDERS are invited, on a FIXED-PRICE BASIS, from public works contractors, for PROVIDING and LAYING about 1.300yd. of 6in. dia. ASBESTOS-CEMENN PIPES and for Fixing Valves and Fittings, etc. at HOLVW LLL.

Tender may be obtained from the Council's Consulting Engineers, MESSRS. WILLIAMS AND CLARKE, 6 Godstall Chambers, Chester, on payment of Two Guineas by cheque made payable to the Holywell Urban District Council, which sum will be refunded on receipt of a bona-fide Tender not subsequently withdrawn, accompanied by a fully priced Bill of Quantities.

Tenders should be delivered to the undersigned not later than 5 p.m. on MONDAY, the 29th February, 1960, and the Council do not bind themselves to accept the lowest or any Tender.

Dated this 26th day of January, 1960.

J. KERFOOT ROBERTS,

Clerk of the Council.

Holywell. Flintshire.

Town Hall, Holywell, Flintshire BOWLAND RURAL DISTRICT COUNCIL. DELEGATED COUNTY ROADS.

DELEGATED COUNTY ROADS.

The District Council, acting as Agents for the West Riding County Council, invite TENDERS for the UNDERMENTIONED PLANT and MATERIALS for the UNDERMENTIONED PLANT and MATERIALS for the 12 months commencing ist April, 1960:

(1) Surface Dressing by Pressure Tanker.

(2) Hired Mechanical Haulage.

(3) Petro and Diesel Rollers.

(4) Petro and Diesel Rollers.

(5) Dry Broken Stone.

(6) Tar for Surface Dressing.

(7) Bitumen for Surface Dressing.

(8) Salt Glazed Earthenware Pipes and Street Guilles.

(9) Concrete Reps.

(10) Concrete Reps.

(11) Concrete Reps.

(12) Concrete Reps.

(3) Forms of Tender and full particulars may be obtained from MR. E. BERRY, Surveyor to the Council. Tenders, in plain sealed envelopes endorsed "Tenders for and bearing no other mark of identification, must reach the undersigned not later than 12 Noon on SATURDAY, the 27th February, 1960.

The Council do not blind themselves to accept the lowest or any Tender.

L. D. TELFORD.

L. D. TELFORD, Clerk to the Council.

CONTRACTS

COUNTY BOROUGH OF DEWSBURY. BEDFORDSHIRE COUNTY COUNCIL. COUNTY BOROUGH OF BIRKENHEAD,

HIGHWAYS DEPARTMENT. ANNUAL CONTRACTS, 1960-61.

ANNUAL CONTRACTS, 1960-61
TENDERS are invited for the FOLLOWING:—
Supply and Lay Single Course and Two-coat

mechanical spraying), Cold Bitumen Emulsion.
Hire of Lorries, Road Rollers and Verge Cutting Equipment.
Schedule Contract for Kerbing, Haunching, Drain-Bug, Footpaths and Culverts.
Forms of Tender from the County Surveyor, Dents Road, Bedford.
Completed Tenders must be submitted in endorsed envelopes to the Cierk of the County Council, Shire Hall, Bedford, on or before TUESDAY, 1st March, 1960.

GEORGE BREWIS, Clerk of the County Council.

Shire Hall, Bedford, 29th January, 1960.

BOROUGH OF EALING.

CONSTRUCTION OF BOUNDARY WALLS-

Forms of TENDER and Specification, etc., can be obtained from the Borough Surveyor on payment of £2.

Tenders to be delivered to the TOWN CLERK, Town Hall, Ealing, W.5, not later than 12 Noon, 25th FEBRUARY, 1960.

CITY OF WINCHESTER.

The Corporation Invite TENDERS for the FOLLOW-ING WORKS:—

(1) Reconstruction and Resurfacing of Roads in the city.

(2) Walling and Reconstruction of Kilham Lane.

(3) Construction of Two Garage Slabs and Approach Roads at Trussell Crescent and Thurmond Crescent.

Documents for these Works may be obtained from the City Engineer, Guildhall, Winchester, on payment of a deposit of \$2 2s. in respect of each Contract, which will be refunded on receipt of a bona-fide Tender and the city of the contract of the

Guildhall, Winchester. 25th January, 1960.

HEBDEN ROYD URBAN DISTRICT

TENDERS are invited for the SUPPLY of a THREE-SECTION TOWER LADDER with platform height when extended of 24ft. mounted on suitable 30cwt. to 3-ton Motorised Chassis, complete with Cab and Cabin Workshop.

Specification may be obtained upon application MR. J. F. MOYSE, Engineer and Surveyor, Council Offices, Hebden Bridge.

Sealed Tenders, endorsed "Tender for Tower Wagon," to be delivered to the undersigned not later 1950.

than 5 o'clock p.m. un Italian 1960.
The Council do not bind themselves to accept the lowest or any Tender.

KENNETH KABERRY.

Clerk of the Council.

LEEDS REGIONAL HOSPITAL BOARD. TO ENGINEERING CONTRACTORS.

TO ENGINEERING CONTRACTORS.

FIXED-PRICE TENDERS are invited for CARRYING OUT the INSTALLATION ONLY of ONE NEW CORNISH BOILER and EQUIPMENT at MANYGATES MOSPITAL, Wakefield.

Applications for Form of Tender and Specification of Form of Tender and Specification (which will be refunded on receipt of a bona-hide Tender and other Contract documents), must be made to the Architect to the Board at the undermentioned address not later than 12 Noon on Wednesday, 17th February, 1960. Cheques should be made payable to the "Leeds Regional Hospital Board" and crossed. A copy of the Drawings, Conditions of Tender and Conditions of Contract may be inspected at Conditions of Conditions

WM. A. SHEE, Secretary to the Board.

EEDS REGIONAL HOSPITAL BOARD. TO HEATING CONTRACTORS.

FIXED-PRICE TENDERS are invited for CARRYING OUT the COMPLETION of STEAM RING MAIN and HEATING to OLD WING at CLAYTON HOSPITAL, Wakeneld, which will be refunded on receipt of a bona-fide from the companied by a deposit of £2 2s. (which will be refunded on receipt of a bona-fide Tender and Sont the Architect to the Board at the undermentioned address not later than 12 Noon on Wednesday, 17th February, 1960. Cheques should be made payable to the "Leeds Regional Hospital Board" and crossed. A copy of the Drawings, Conditions of Tender and of MESSRS. PASHLER AND PARTNERS, Consultant Engineers, City Chambers, Infirmary Street, Leeds, 1, Sealed Tenders, in the endorsed envelope provided, must be delivered to the undersigned not later than 12 Noon on WEDNESDAY, 16th March, 1960, The Board does not bind itself to accept the lowest or any Tender.

WM. A. SHEE, Secretary to the Board.

CONTRACTS

PENSBY ROAD IMPROVEMENT. (SPARKS LANE TO BOROUGH BOUNDARY).

TENDERS are invited for the ABOVE WORK, which

udes:—

(a) 470 lin. yd. approx. nominally 30ft. wide
8in. thick Doubly Reinforced Concrete
Carriageway.
(b) 150 lin. yd. approx. nominally 30ft. wide
Hot Rolled Asphalt Carriageway on Dry
(c) 1,170 lin. yd. approx. 12in. x 6in. Kerba,
2,300 sq. yd. approx. 12in. x 6in. Kerba,
ond Grass Verges.
(d) 540 lin. yd. approx. of 15in./9in. dia.
Surface Water Sewer, including Manholes
contract documents and Drawings may be inspected.

and Guillies.

Contract documents and Drawings may be inspected at the BOROUGH ENGINEER AND SURVEYORS OFFICE, Municipal Buildings, 3 Conway Street, Birkenhead. Tender documents supplied on deposit of £5, returnable on receipt of a bona-fined render. Closing date for Tenders, 22nd FEBRUARY, 1960.

BOROUGH OF BILSTON.

LOWERING OF COSELEY ROAD (A.463), BENEATH BILSTON STATION RAILWAY BRIDGE AND UNDERPINNING OF BRIDGE FOUNDATIONS,

UNDERPINNING OF BRIDGE FOUNDATIONS.

TENDERS are invited for the LOWERING OSSLEY ROAD (A.463), beneath Bilston Station Railway Bridge, and Underpinning of Bridge Foundations of Contract, Specification and Bills of Quantities the Applications of Contract, Specification and Bills of Quantities should be made to the Borough Engineer, Municipal Buildings. Nail Street, Bilston, Stafs... not later than Buildings. Nail Street, Bilston, Stafs... not later than Studies of the Staff of Tenders will be given when the documents are supplied by the Borough Engineer.

The Council does not bind itself to accept the lowest or any Tender.

A. M. WILLIAMS,

A. M. WILLIAMS. Town Clerk.

Town Hall, Bliston, Staffs, January, 1960. CITY OF MANCHESTER.

TENDERS invited for the ERECTION of FIVE SHOPS and FIVE MAISONNETTES at PEEL HALL NEIGH-BOURNOOD, Wythenshawe.
Bill of Quantities from CITY ARCHITECT, P.O. Box 488, Town Hall. Tenders returnable by 26th FEBRUARY.

CITY OF MANCHESTER.

TENDERS are invited for the SUPPLY and DELIVERY of PEDESTRIAN GUARD RAILS for PICCADILLY, comprising approx. 625 lin. yd. of straight and curved lengths.

Tender Forms, returnable by 10 a.m. on 29th Tender Forms, returnable by 10 a.m. on 29th Hall, Manchester, 2.

CITY OF MANCHESTER.

TENDERS are invited for the SUPPLY, DELIVERY and LAYING of the FOLLOWING:—

(1) Rolled Asphalt in Carriageways.

(2) Rolled Asphalt in Footpaths.

(3) Rolled Asphalt in Footpaths.

(4) Rolled Asphalt in Reinstatements to Carriageways.

(5) Rolled Asphalt in Reinstatements to Footpaths.

(6) Mastic Asphalt in Footpaths.

(6) Mastic Asphalt in Reinstatements.

(7) Bitumen Macadam in Carriageways.

Tender Forms, returnable by 2nd MARCH, 1960, from the CITY SURVEYOR, Town Hall, Manchester, 2...

CITY OF MANCHESTER.

TENDERS are invited for the ERECTION of approx. 93 25ft. CONCRETE COLUMNS in PARRS WOOD ROAD (North and South), and 60 20ft. CONCRETE COLUMNS in YEW TREE ROAD. Tender documents, returnable by 1st MARCH, 1960, from the CITY SURVEYOR, Town Hall, Manchester, 2.

CITY OF MANCHESTER.

TENDERS invited for ERECTION of a PUBLIC CONVENIENCE at HUNTERS LANE, GORTON. Specification and Drawings from CITY ARCHITECT, P.O. BOX 488, TOWN Hall. Tenders returnable by MARCH 2nd.

CITY OF MANCHESTER.

TENDERS invited for new TARMAC PLAYGROUND required at St. PHILIPS C. of E. SCHOOL, HULME. P.C. Box 488, Town Hall. Tenders returnable by FEBRUARY 24th.

OF MANCHESTER CITY

TENDERS are invited for the SUPPLY of approx. 300,000 gallons of TAR for TARSPRAYING during the period 1st April to 31st October, 1960. Tender Forms, returnable by 10 a.m. on 24th FEBRUARY, 1960, from the CITY SURVEYOR, Town Hall, Manchester, 2.

MANCHESTER. OF

TENDERS are invited for the SUPPLY of the UNDERMENTIONED MATERIALS during the 12 months commencing 1st April 1950.—
(a) Chippings for Tarspraying.
(b) Rolled Asphalt (Hot Process), Cold Bluminous Macadam, Hot Bituminous Macadam, Low Penetration Hot Bituminous Macadam, Hot Suphalt, Sand Carpet and Sealing Grit.
Tender Forms, returnable by 10 a.m. on 24th FEBRUARY, 1950, from the CITY SURVEYOR, Town Hall, Manchester, 2.

OF MANCHESTER CHEADLE AND GATLEY OVERSPILL AREA-

ROAD AND SEWER CONTRACT

TENDERS are invited for CONSTRUCTING 13,650 sq. yd. BITUMEN MACADAM CARRIAGEWAY, 3,290 lin, yd. of 6in, to 18in, dia. SEWER, and all ancillary work.
Tender documents (returnable by 7th MARCH, 1960) obtainable from the CITY SURVEYOR (Room 208), Town Hall, Manchester, 2.

ADVANCE PREPARATION OF HOUSING ESTATE. BEWDLEY LANE HOUSING SITE.

TENDERS are invited for the CONSTRUCTION of prox. 1,900 sq. yd. of PITCHED CARRIAGEWAY, 15 lin. yd. of SURFACE WATER SEWER, and approx. 1,900 set. vg. or approx. or ap

brawins allowed the above office during normal working holohole and the above office during normal working holohole and the state of the delivered to the undersigned not later than Noon on MONDAY, 29th February, 1960.

The Council does not bind itself to accept the lowest or any Tender.

N. F. DAVIES.

N. F. DAVIES, Town Clerk.

Town Clerk's Office, Evesham, February, 1960.

BOROUGH OF NEWARK - ON - TRENT. ATTESTED CATTLE MARKET-EXTENSIONS.

ATTESTED CATTLE MARKET—EXTENSIONS.

TENDERS invited for the FOLLOWING.

(1) Construction of 42 Store Cattle Pens with Since Construction of 42 Store Cattle Pens with Since Construction in 9in. Brickwork of a Calf Auction, with 6in. Concrete Floors (230yd. sup.) and Asbestos-Cement Roof Covering. Including Fixing of Penning, Rails and Gates.

(3) Extension of existing Truck Wash in 8in. Concrete (1784) sup.).

(4) Construction of 1,900yd. sup. of 6in. Concrete Roadward.

(5) Drainase. Water Supply and Electrical Installation of the Company o

J. H. M. GREAVES, Town Clerk

Aunicipal Buildings, Balderton Gate, Newark-on-Trent. 1st February, 1960.

ORPINGTON URBAN DISTRICT

PRIVATE STREET WORKS.

NORTH ACCOMMODATION ROAD (PART), OFF SPUR ROAD, ORPINGTON.

TENDERS are invited for the MAKING-UP of the ABVIE STREET, the length of which I 73 In. ABVIE STREET, the length of which I 73 In. All 1975 of the STREET, and I 75 In. All 1975 of the STREET, and

anciliary Works to Existing Surface Water Drainage Systems.

The Conditions of Contract and Drawings may be inspected at the offices of, and Bills of Quantities in the Contract of the Contra

STEPHEN KING. Clerk of the Council.

Council Offices, Crofton Pound Hill, Orpington, Kent. 11th February, 1960.

THE URBAN DISTRICT COUNCIL OF

REPAIRS-FIREPLACES AND STACKS.

TENDERS are invited for REPLACING STEEL FLUES and GRATES by BRICK FLUES and "ERA"-TYPE GRATES in 96 Bl.S.F. HOUSES at PENYWAUN. Aberdare.

Tender documents may be obtained from the Tender and Surveyor, Vestry Hall, Aberdare, on payment of a deposit of £1.

Tenders, in plain sealed envelopes bearing no mark or indication of the sender but endorsed "Bl.S.F. Houses," must reach me on or before 26th FEBRUARY, 1960.

D. G. JAMES, Clerk of the Council.

Town Hall, Aberdare, 1st February, 1960.

WILLITON RURAL DISTRICT COUNCIL. STOGURSEY WATER SUPPLY.

CASTLE STREET AND MONKTON FARM AREA

TENDERS are invited for the FOLLOWING CON-STRUCTIONAL WORK:—
Supplying and Laying 1,000yd. of 3in. dia.
Class "C" Asbestos-Cement Water Main.
Supplying and Fixing of Six 3in. dia. Sluice

Class "C" Asbestos-Cement Water Maln. Supplying and Fixing of Six 3in. dia. Stuice Supplying and Fixing of One Air Valve.

Supplying and Fixing of One Air Valve.

Supplying and Fixing of One Fire Hydrant. Direction at the office of the Engineer. MR. S. E. BALCH, A.M.I.Mun.E., Council Offices, Fore Street, Williton, Taunton, Somerset, and the Form of Tender. Specification and Bill of Quantities can be received to the other of the Guineas by cheeue, which will be refunded upon the receipt of a bona-fide Tender and the return of all documents.

Tenders must be delivered to the undersigned not late than Noon on MONDAY. 29th February, 1960. The Council do not bind themselves to accept the lowest or any Tender.

F. P. RISDON.

F. P. RISDON, Clerk to the Council.

Council Offices, Williton, Taunton. 1st February, 1960.

CONTRACTS

BOROUGH OF EVESHAM. COUNTY BOROUGH OF BRIGHTON. WARREN ROAD-FALMER ROAD, WOODINGDEAN.

ROAD WIDENING AND RECONSTRUCTION.

TENDERS are invited for the CARRYING OUT of ROADWORKS at Woodingdean, Brighton. The works consist of Kerbing, Flag and Coated Macadam Paving, Reconstruction of Existing Carriage-way Foundation, and Widening to 30ft. in Warren Road and 24ft. in Falmer Road, Surface Drainage, and ancillary works. The total length of roads involved is approx. 114 miles. The Drawings and General Conditions of Contract may be inspected at the Office of the Borough Surveyor, 26-30 King's Road, Brighton, from whom the Specification and Bills of Quantities may be obtained.

obtained, with priced Bills of Quantities and other Tenders, with priced Bills of Quantities and other Tenders, must be returned to the undersigned, in the plain sealed envelope provided, not bearing any name or mark indicating the sender, endorsed "Warren Road-Falmer Road Widening," not later than Noon on SATURDAY, 27th February, 1960.

The Council does not bind Itself to accept the lowest or any Tender.

W. O. DODD,

W. O. DODD, Town Clerk.

Town Hall, Brighton, 1. January, 1960. CITY OF BIRMINGHAM.

The Public Works CONTRACTORS.

The Public Works Committee invite TENDERS on PIXED PRICE BASE IN MEASURE and VALUE CONTRACT for BASE WIDENING OF CARRIAGEWAY IN COVENTRY ROAD (Part), between GEORGE ROAD and FRANCIS ROAD.

Copies of the Specifications, Bills of Quantities and Forms of Tender may be obtained on payment of City Engineer and Surveyor, Civic Centre, Birmingham, 1, to whom all cheques should be made payable, the deposit will be returned on receipt of a bona-fide Tender.

The deposit win be returned on receipt of a solinal state of the Roadworks can be seen at Room 339. Plans for the Roadworks can be seen at Room 339. Plans for the Room Clerk's Office (Room B.21). Council House, Birmingham, 1, not later than 12 Noon on WEDNES-DAY, 24th February, 1960, when they will be opened. The Committee do not bind themselves to accept the lowest or any Tender.

The Committee do not bind themselves to accept the lowest or any Tender.

The Committee do not bind themselves to accept the lowest or any Tender.

T. H. PARKINSON, Acting Town Clerk.

Council House, Birmingham, 1.

CROMPTON URBAN DISTRICT COUNCIL.

ANNUAL CONTRACTS, 1960-61.

TENDERS are invited for the SUPPLY of the FOLLOWING MATERIALS for the year ending the 31st March, 1961:—

TENUENCE

1st March., 1961:—
(2) Sroken Stone.
(3) Concrete Flags. Kerb and Edging.
(4) Sand.
(5) Stoneware Pipes.
(6) Dustbins. Stuminous Macadam.
(7) Tar and sultiuminous Macadam.
(9) Sweeper/Collector (Karrier) Brush Refilis.
(10) Cement.
(11) Cold Asphalt.
(12) Iron Castings.
(13) Electric Lamps.
(13) Ground Lime.
(13) Ground Lime.
(16) Petrol.
Specifications and Forms of Tender may be obtained from the Engineer and Surveyor, Town Hall, Shaw.
Completed Tenders shall be returned to the undersigned not later than 26th FEBRUINTON.

Clerk of the Council.

Town Hall, Shaw, Near Oldham

SETTLE RURAL DISTRICT COUNCIL.

DELEGATED ROADS.

DELEGATED ROADS.

TENDERS are invited for the SUPPLY of the FOLLOWING for the year ending 31st March, 1961:

(1) Refined Tar.
(2) Surface Dressing by Pressure Tanker.
(3) Surface Dressing by Pressure Tanker.
(4) Mechanical Haulage.
(5) Tools (Various).
(6) Earthenware Pipes.
(7) Concrete Edging and Channel.
(7) Concrete Edging and Channel.
(8) Forms of Tender and full particulars may be obtained from the undersigned an receipt of a stamped addressed envelope.
(9) Enders of the undersigned not later than 12 Noon on SATURDAY, 27th February, 1960.
The Council do not bind themselves to accept the lowest or any Tender.
(Signed) S. C. DAVIDSON.

Highways Department,

Highways Department, Town Hall, Settle, Yorkshire. 2nd February, 1960.

[JCKFIELD RURAL DISTRICT COUNCIL.

TENDERS-MARESFIELD VILLAGE SEWERAGE.

TENDERS—MARESTIELD VILLAGE SEWERAGE.

TENDERS are invited from experienced contractors for CONSTRUCTION of about 2,500yd, of Sin. STONEWARE SEWERS, CONCRETE MANHOLES, etc., and Remedial Work to the Existing Sewage Disposal Works.

On the Conclisions of Contract, Specification, Bills of The Conclisions of Tender may be obtained from the Council's Consulting Engineers, MESSRS, LEMON AND BLIZARD, 59 Tufton Street, Westminster, S.W.1, on payment of a Google of £3 3s., made payable to the Council, which will be returned on receipt of a bona-fide Tender and return of all may be inspected at the Engineers' Office or at Tise Council Offices.

receipt or a contractor.

Gouwents loaned to the contractor.

may be inspected at the Engineers' Office or at the Council Offices.

The completed Form of Tender and Priced Bills of Quantities are to be delivered to the undersigned in a plain sealed envelope endorsed "Maresfield Village Sewerage," not later than Noon on MONDAY.

14th March, 1960.

The Council are not bound to accept the lowest or any Tender.

D. C. DURRANT,

Clerk of the Council.

Council Offices. Beacon Road Crowborou Sussex.

CONTRACTS

STAFFORDSHIRE COUNTY COUNCIL. BIRMINGHAM-PRESTON MOTORWAY.

TENDERS will be invited by further advertisements to appear early in March, 1960, for the FOLLOWING CONTRACT:—
Contract Section "A" Dunston to Whitereave

to appear early in March, 1960, for the FOLLOWING
CONTRACT:

Contract Section "A" Dunston in Whitgreave.

The Construction of 7 miles of new Motorway and 0.7 miles of Link Road. forming a
By-pass of Stafford, comprising Earthworks,
By-pass of Stafford, comprising Earthworks,
Surfacing, etc., and including 25 Bridges.

The purpose of this advertisement is to enable civil
engineering contractors to secure advance information
of the location, nature and extent of the works of
the scheme, which is the first section of 26 miles of
motorway from Dunston to the Cheshire Boundary
or not they desire to submit Tenders, and for their
guidance, general Drawings, not necessarily Contract
Drawings, may be inspected at the Office of the
County Surveyor, County Buildings, Stafford, by
appointment at any time during customary office hours.

T. H. EVANS.

T. H. EVANS. Clerk of the County Council.

County Buildings,

LANCASHIRE COUNTY COUNCIL. BIRMINGHAM-PRESTON MOTORWAY.

BIRMINGHAM-PRESTON MOTORWAY.

TENDERS will be invited early in March, 1960, for the FOLLOWING CONTRACTS:—
CONTRACT County Hall, Preston.

ANCASHIRE COUNTY COUNCIL.

TENDERS will be invited from selected firms for the DEVELOPMENT of PLAYING FIELDS and FENCING, etc., at the FOLLOWING:—
Accrington College of Further Education. Rirkby 8t. Michaels R.C. Primary School. Litherland 8t. Wilfrids R.C. Secondary. Lance Education. Morecambe College of Further Education. Torrisholme County Primary School. Lancaster R.C. Secondary School. Lancaster R.C. Secondary School. Lancaster R.C. Secondary School. Loncaster R.C. Secondary School. County Hall, Primary School. Recounty Recounty Fig. 1980.

LANCASHIRE COUNTY COUNCIL.

PLANT.

PLANT.

TENDERS are invited for PLANT, comprising:—
Two Blaw K. GNPPO Paver Finishers.
One International Drott BRESS Skid Shovel.
One Heavy Diesel-engined Roller.
One 15cwt. Mobile Crane.
Two Hab Hydraulic Lorry Loaders (2-ton).
SK Ferguson ES Paver Finishers.
Three Hayter Highway Mowers.
Three Hayter Highway Mowers.
Three Hayter Highway Mowers.
Three Hayter Highway Mowers.
Three Ferguson Dynabalance Mowers.
One Lolode Trailer.
Four Twose Somerse Cyerge Trimmers.
Fight Ailen Rog Cup ""C".
One Vistaline White Line Machine.
One Plastic Heater and Mixer.
Four Atkinson Bulk Gritter Bodies.
Six Tuke and Bell Gritting Attachments.
Two 250-gallon Work.
Three Salt and Ash Loading Plants.
Tender documents obtainable from COUNTY
Tender documents obtainable from COUNTY
SURVEYOR. County Hall, Preston (P.O. Box 9), on payment of a deposit of £5 (returnable only its bena-fiel tenderers). Cheques to be made payable to contractors must state group (or groups) for which they wish to submit Tenders, quoting Ref. 136/51.
Tenders returnable by 10 a.m. on SATURDAY.
Sth March, 1960.

HITCHIN RURAL DISTRICT COUNCIL.

PARISH OF ICKLEFORD.

SEWERAGE CONTRACT NO. 8.

SEWERAGE CONTRACT NO. 8.

The Council invite TENDERS for the EXECUTION of SEWERAGE WORKS, comprising the Furnishing and Laylo of about 4.400 comprising the Furnishing ware and Spun-iron Pipe Sewers, Manholes, House Drains, Ventilators, and about 1.700yd of 7in. Spuniron Pumping Main, and the Construction of a Sewage Pumping Station, and other appurtenant works.

Contractors desirous of tendering are requested to Month of the Contract of the Contract of the Council, not later than MONDAY. 22nd February. 1960, after which full particulars will be forwarded. The deposit will be returned on receipt of a bona-fide Tender and considerable experience in similar works and considerable experience in similar works and be prepared to furnish security with an approved society for the fulfilment of the Contract.

Tender for Sewerage. "must be sent to the undersigned by a date to be given by the Engineers.

The lowest, or any, Tender will not necessarily be accepted.

W. E. POTTER. Clerk to the Council.

Council Offices. 21 Bancroft. Hitchin, Herts. 2nd February, 1960.

COUNTY OF CORNWALL

Notice is hereby given of the intention to let separately the SUB-CONTRACT for STRUCTURAL STEELWORK in connection with the proposed erection of a new Fire Station at CAMBORNE.
Applications are invited for permission to submit a FIXED-PRICE TENDER for THIS SUB-CONTRACT and should be made to the Country AUB-CONTRACT AND AUGUST AUGU

E. T. VERGER, Clerk of the County Council.

SUPPLEMENT

County Hall, Truro. 4th February, 1960.

COUNTY COUNCIL OF MIDDLESEX BRIDGE OVER RIVER FRAYS, IVER LANE, UXBRIDGE.

TENDERS are invited for the DEMOLITION, RECONSTRUCTION and WIDENING of the BRIDGE OVER the RIVER FRAYS. In IVER LANE. Usbridge, including Approaches, to a total length of 80 vd. Plans may be inspected at the offices of the County Engineer, Middlesex House, 20 Vauxhall Bridge Road. S.W.1, and Contract documents obtained on payment of a degosit of £10, returnable on receipt of a bona-freedom of the county Council does not bind the property of the County Council does not bind itself to accept the lowest or any Tender.

Gerk of the County Council Contract Council Co

Guildhall, Westminster, S.W.1.

COUNTY BOROUGH OF SOUTHAMPTON.

TENDERS are invited for ERECTION of THREE-CLASSROOM ANNEXES TWESTON PARK INFANTS' SCOOL FOR Sand particulars (including Bill of Quantitles) from Borough Architect on written appli-cation by 20th FEBRUARY, 1960. R.I.B.A. Contract, plus Supplementary Conditions, available for inspection.

Tender to TOWN CLERK, Civic Centre, Southampon, by 10 a.m., 21st MARCH, 1960.

ROROUGH OF HARTLEPOOL. ERECTION OF 36 HOUSES, FOUR MAISONNETTES AND EIGHT GARAGES.

TENDERS are invited for the ERECTION of BRICK-BUILT HOUSES and MAISONNETTES in the THROSTON REDEVELOPMENT AREA, Hartlepool. Plans may be inspected at, and Bills of Quantities and Form of Tender may be obtained from, the office of the Borough Engineer, Borough Buildings, the Hartlepool of the Borough Engineer, Borough Buildings, the office of the Section of a bona-fide Tender, will be a section of a bona-fide Tender of 36 Houses, Four Maisonnettes and Eight Garges." must be delivered to the undersigned not later than 12 Noon, MONDAY, 7th March, 1950.

The Corporation do not bind themselves to accept the lowest or any Tender.

Borough Buildings,

Borough Buildings,

Town Clerk,

Borough Buildings, Hartlepool. CITY OF SALFORD. PROPOSED 28 (FOUR-STOREY) MAISONNETTES-OAKLANDS ROAD, SALFORD, 7.

OAKLANDS ROAD, SALFORD, 7.

FIRM-PRICE TENDERS are invited for the CONSTRUCTION of 28 MAISONNETTES in Three Fourstorey Blocks, at OAKLANDS ROAD, Salford, 7.
Conditions of Contract and Drawinss may be
Conditions of Contract and Drawinss may be
Contract and Drawins may be
Contract and Drawins may be
Contract and Drawins may be
Firm-price Tender obtained from, the City Engineer
and Surveyor's Department, Town Hall, Salford, 3,
on payment of a deposit of £2 2s., which will be
returned on submission of a bona-fide Firm-price
Tender, not subsequently withdrawn.
Firm-price Tenders, on the prescribed form, sealed
in the envelope provided, and bearing no other mark
or identification, must be forwarded to the undersigned
so as to be received not later than 10 a.m. on
Winderster of the contract of the contract

WORTLEY RURAL DISTRICT COUNCIL. ANNUAL SUPPLIES.

TENDERS are invited for the SUPPLY of the UNDERMENTIONED MATERIALS and LABOUR for the 12 months commencing 1st April, 1960:—

TENDERS are invited for the SUPPLY of the UNDERMENTIONED MATERIALS and LABOUR for the 12 months commencing 1st April, 1960.—

(1) Tar and Bitumen for Surface Dressing, in Bulk, in Barrels, and for Supply and Apply, (3) Bituminous Cold Emulsion, in Bulk, in Barrels, and for Supply and Apply, (4) Tarred Macadam and Bituminous Macadam (Granite, Limestone and Siag), (5) Cold Asphalt and Sealing Grit. (6) Cold Asphalt and Sealing Grit. (7) Walling Stone, Broken Stone and Pitching. (8) Sand and Gravel. (9) Concrete Flags, Kerbs, Edging and Channel Blocks. (10) Stoneware Pipes, Bends, Junctions and Specials. (11) Bricks. (12) Covers and Frames. (13) Tools and Implements. (14) Lubricating Oils and Paraffin. (15) Coal. (16) Hire of Plant and Transport. Specifications of materials required (where appropriate) can be inspected at the Office of the Council's Engineer and Surveyor, Council Offices, Grenoside, Datalmed must Paraffin Moon on the 29th FERBILARY 1005.

Sheffield, from whom putrils of these obtained.
Tenders must reach the undersigned not later than Noon on the 29th FEBRUARY, 1960, and must be delivered in the envelope provided, which shall not bear any name or mark indicating the sender.
The Council reserves the right to divide contracts between two or more contractors, and does not bind itself to accept the lowest or any Tender.

ADRIAN M. KELLY,
Clerk of the Council.

Council Offices, Grenoside, Sheffield.

CONTRACTS

THE HASTINGS CORPORATION.

TENDERS are invited for the SUPPLY of the FOLLOWING ITEMS to certain establishments for a period of 12 months from 1st April, 1960.—

Bread, Cakes, Groceries and Provisions, Fish, Meat, Vegetables and Fruit (with the exception of Potatoes), Milk, Papers and Periodicals: also for Chimney Sweeping, Window Cleaning, Hairdressing and Shaving, Laundry and Dry Cleaning and Shaving, Tender Forms may be obtained on application to the TOWN CLERK, Town Hall, Hastings.

OF LIVER

RIVER DEE SUPPLY.

TENDERS invited for LAYING Solin. dia. STEEL
MAIN and anciliary forks, all follows:

(a) contact No.
(b) Contract No. 9.—Barrow to Frodsham Section, 7 miles of Main.
(c) Contract No. 9.—Barrow to Frodsham Section, 6 miles of Main.
(c) Contract No. 10.—Frodsham to Norton and canal crossings.

Documents from Water Engineer, 55 Dale Street, Liverpool, 2 (deposit £5 each contract, payable City ireasurer).

reasurer).
Tenders returnable by APRIL 4th, 1960.
(J.6034.)
THOMAS ALKER,
Town Clerk

LEES URBAN DISTRICT COUNCIL. ANNUAL TENDERS.

TENDERS are invited for the SUPPLY and DELIVERY and when required of the FOLOWING MATERIALS the process of the Folowing MATERIALS (2) Bituminous Macadam (3) Cold Asphalt. (4) Grante Chippings. (5) Sand. (6) Salt. (7) Sand. (8) Scavenger Brooms. (8) Scavenger Brooms. (9) Scavenger Brooms.

(2) Gran.te Chipping...
(3) Sand.
(5) Sand.
(6) Satt.
(6) Sattbins.
(7) Sattbins.
(8) Scavenger Brooms.
Forms of Tender may be obtained from the Surveyor, Council Offices, Lees, near Oldham, Lancashire, on receipt of a stamped addressed envelope. Clearly endorsed Tender for Materials, must be delivered to the On SATURDAY. 27th February, 1960.
The Council does not bind itself to accept the lowest or any Tender, and any contract will be subject to the Standing Orders of the Council.

F. ALLAN CROPPER,
Clerk of the Council.

Council Offices, Cross Street, Lees, nr. Oldham.

GOLBORNE URBAN DISTRICT COUNCIL. TENDERS FOR MATERIALS, 1960-61.

TENDERS FOR MATERIALS, 1960-61.

The above Council invite TENDERS for the SUPPLY of the FOLLOWING MATERIALS, etc.,—
Coated Limestone Macadam, Coated Siag Macadam, Cold Asphalt, Concrete Flags and Kerbs, Drain Pipes and Surface Dressing of Further participations of Foundation of Tender may be obtained from MR. J. B. HOYLE, A.M.I.C.E., M.I.Mun.E., Engineer and Surveyor, Council Offices, Lowton, near Warrington.

Tenders, in plain sealed envelopes endorsed "Tender for —, bearing no names or mark indicating the seep of the Council Control of the Council Control of the Council Cou

THE NORTHWICH RURAL DISTRICT

TENDERS are invited for the SUPPLY and ERECTION of 48 PRECAST CONCRETE BUS SHELTERS of the Enclosed and Cantilever type, in various Copies of the Sencification, Bills of Quantities and Form of Tender may be obtained from the Offices of the Engineer and Surveyor, Whitehall, Hartford, Northwich, Cheshire, where the Drawings may be inspected upon payment of Two Guineas, which will be refunded upon receipt of a bona-fide Tender not subsequently withdrawn and the return of all documents, bearing no name or mark indicating the sender, and must be delivered with the Tender documents, bearing no name or mark indicating the sender, and must be delivered onto later than 10 a.m. on THURSDAY, the 3rd March, 1960, to the CLERK OF THE COUNCIL.

RURAL DISTRICT COUNCIL OF DURSLEY.

COMPREHENSIVE SCHEME OF WATER SUPPLY— CONTRACT NO. 4 — WITHIN THE PARISHES OF CAM AND COALEY.

The Council invite TENDERS on a fixed-price basis from experienced civil engineering contractors for the FOLLOWING Works of WATER SUPPLY—

(1) Construction of a 40,000-pailon Concrete Reservoir. of a 40,000-pailon Concrete Break Pressure Tank.

(2) Construction of a 5,000-pailon Concrete Break Pressure Tank.

(3) The Provision and Laying of Spun-Iron Water Mains, 200 lin. yd. 6in. dia.

(4) The Provision and Laying of Asbestos-Cement Pressure Mains— of Asbestos-Cement— of Connection of Calvanised Steel Mains of 2in. and 1½in. dia., 850 lin. yd. 6in. dia.

(5) The Provision and Laying of Galvanised Steel Mains of 2in. and 1½in. dia., 850 lin. yd. 6in. dia.

(6) Connections, together with Disconnection of existing Service Connections from existing Mains and Reconnection to mew Mains, together with ancilary works.

Contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tendering are requested to advise a contactors desirous of tender and webbased or requested to a contactors desirous of tenders and the provided contactors desirous of tenders. Heaves a contactor of tenders and the provided contactors desirous of tenders and the provided contactors desirous of tenders and the provided contactors desirous de

H. A. PATE, Clerk of the Council.

Council Offices, Kingshill, Dursley, Glos. 2nd February, 1960.

CONTRACTS

BRECONSHIRE COUNTY COUNCIL.

SURFACE DRESSING, 1960.

TENDERS are invited for SURFACE DRESSING of ROADS (450,000 sq., yd.). Particulars from the County Surveyor, Watton Offices, Brecon. Tenders to be returned to the undersigned by 7th MARCH, 1960.

The Council do not bind themselves to accept the lowest or any Tender, Owest or any Tender, Clerk of the County Hall,

BOROUGH OF CAMBERWELL WIDENING OF A.205, LORDSHIP LANE (PART).

TENDERS invited for works connected with WIDEN-ING PART of LORDSHIP LANE (between Dulwich Common and Wood Vate). Involving Site Clearance, and Wood Vate). Involving Site Clearance, and Asphalt Surfacing and Miscelland Residence of the Borough Miscelland Residence of the Borough Residence of the Re

ovided. Town Hall, Camberwell, S.E.S.

BOROUGH OF CHELMSFORD CONSTRUCTION OF RUNNING TRACK AND FACILITIES FOR FIELD EVENTS.

FACILITIES FOR FIELD EVENTS.

TENDERS are invited from confractors with experience of works of similar nature for the construction of a cinder RUNNEW of the CONSTRUCTION o

Municipal Offices, Coval Lane, Chelmsford.

SUTTON-IN-ASHFIELD URBAN DISTRICT

TENDERS FOR ROAD MATERIALS.

The above Council invite TENDERS for the UNDERMENTIONED MATERIALS for the year ending 31st March, 1961:
Tarred Macadam.
Bituminous Macadam.
Bituminous Macadam.
Bituminous Macadam.
Bituminous Macadam.
Bituminous Macadam.

Tarred Macadam.
Bituminous Macadam.
Sereader.
Tar and Bituminous Compounds.
Cement.
Cement.
Flags and Kerbs.
Stoneware Pipes.
Stoneware Pipes.
Street Guilles.
Gravel and Ballast.
Sand.
Gravel and Ballast.
Sand.
Flag Cold Asphalt.
Dir Climestone or Siag Chippings.
Ready Mixed Concrete.
Forms of Tender and Specification may be obtained from the Office of the Engineer and Surveyor to the Council, MR. IAN L. McCALLUM, M.Inst.Mun.E.,
Council Offices. Forest Lodge, Station Road, Sutton-lines of the Engineer and Surveyor to the Sealed Tenders, endorsed "Tender for Materials," must be received by the undersigned not later than 12 Noon on WEDNESDAY, the 2nd March, 1960.
The Council do not bind themselves to accept the lowest or any Tender.
WALTER LAUGHTON,
Clerk of the Council.

Barclays Bank Chambers, Low Street, Sutton-in-Ashfield. 4th February, 1960.

BENFLEET URBAN DISTRICT COUNCIL. PRIVATE STREET WORKS.

TENDERS will shortly be required for the MAKING-OI SIDWELL AVENUE. SIDWELL CHASE, DWELL LANE, CUMBERLAND AVENUE (Part), IMBERLEY ROAD (Part), and KENTS HILL ROAD, buth Benfleet.

KIMBERLEY ROAD (Part), and KENTS HILL ROAD, South Benfleet.

The Works comprise approx. 20,450 super. vd. of Reinforced Concrete Carriageways, 3,450 lin. vd. of Sewer, 10,500 super. vd. Concrete Footways and 6,050 lin. vd. of Concrete Kerb. Contractors who desire to receive a Specification, Forms of Tender and Engineer and Survey Should make application to the Engineer and Survey Should make application to the Engineer and Survey Should make application to the Application of the Concrete Report of th

D. GRUDGINGS, Clerk of the Council.

A MERSHAM RURAL DISTRICT COUNCIL. ENGINEER AND SURVEYOR'S DEPARTMENT.

COUNCIL HOUSES-EXTERNAL REDECORATIONS.

The Council have under consideration a programme of EXTERNAL REDECORATIONS by Contracts for HOUSES on Sites varying from Eight to 54 Houses of Houses of the Separate State of the Contracts according to the separate Service moved. The Council set a high standard for this work, and a guide to contractors, a priced schedule has been prepared for each site. The work will be closely supervised to ensure that the specifications are adhered to. Selected contractors will be required to submit Tenders based on the priced schedule. Contractors wishing to be considered for the work of Council contractors with the supervised to ensure that the Selected Contractors will be required to submit Tenders based on the priced schedule. Contractors wishing to be considered for the work of Council, enclosing particulars of similar work recently carried out by them.

The Council will select from the applicants those contractors they consider have the necessary experience and ability to comply with their requirements.

H. E. BUXTON, Clerk to the Council.

Elmodesham House, 42 High Street, Amersham, Bucks.

BUCKS. COUNTY COUNCIL. HIGHWAYS AND BRIDGES COMMITTEE.

APPLICATIONS are invited from persons or firms able to undertake FENCING WORKS for inclusion on the approved lists of selected contractors from whom Tenders may subsequently be invited for the Execution, under Contract, of such Works in fieu of their being invited by public advertisements.

Applications, containing particulars of the types of Federal Contractors, and the subsequently being invited by public advertisements.

Applications, containing particulars of the types of Federal Contractors, and the subsequence of Federal Contractors, and the subsequence of Federal Contractors, and the subsequence of Federal Contractors, H.16."

R. E. MILLARD.

County Hall.

COUNTY BOROUGH OF READING. WHITLEY WOOD ROAD FOUL SEWER.

TENDERS are invited for CONSTRUCTION of 190 in, va. (approx.) FOUL SEWER and other appurtenant forces in private property in Whitley Wood Road General Conditions and Drawings may be inspected, and Bill of Quantities, etc., obtained, for fee of Two Guineas (cheques payable to Reading Corporation) at Borough Surveyor's Office (P.O., Box 17), Town Hall, Reading. Fee refunded for bona-fide Tender. Tenders to be delivered to TOWN CLERK, Town Hall, Reading, by 12 Noon on 1st MARCH, 1960. Hall, Reading, by 12 Noon on 1st MARCH, 1960. White Wood Road Foul Sewer, but bearing no indication of sender.

COUNTY BOROUGH OF READING.

DEMOLITION OF NO. 6 LONDON STREET AND THE ISLAND BAKERY, READING.

TENDERS are invited for the DEMOLITION of the

ABOVE PROPERTY.
Plans, Specifications, Forms of Tender, etc., may be obtained at Borough Surveyor's Office (P.O. Box 17), Town Hall, Reading.

19, Town Hall, Reading.

19, Town Hall, Reading.

19, Town Hall, Reading.

19, Town Hell, Reading.

19,

BOROUGH OF RICHMOND (SURREY). UNIFORM AND PROTECTIVE CLOTHING.

UNIFORM AND PROTECTIVE COUNTRY.

The COUNCIL invite TENDERS for UNIFORM and PROTECTIVE CLOTHING.
Form of Tender, etc., can be obtained from the Borough Engineer and Surveyor, Hotham House, Heron Court, Richmond, Survey.
Tenders, in sealed envelopes endorsed "Tender for Clothing," to be delivered to the undersigned not later than the council do not bind themselves to accept the lowest or any Tender.

CLIFFORD HEYWORTH.
Town Clerk.

Town Hall, Richmond, Surrey

BOROUGH OF BARNES.

WESTFIELDS HOUSING SCHEME-PART II

BEVERLEY BROOK SITE-CROSS STREET, S.W.13.

BEVERLEY BROOK SITE—CROSS STREET, S.W.13.

FIXED-PRICE TENDERS are invited for the ERECTION of 114 FLATS in Five Blocks in Crosswall Construction—Four Blocks of Four Storeys with Pile Foundations and Ground Floor Beams by other contractor. One Three-storied Block, including Strip Tomon of Toder Drawings, Socification and Bills of Quantities may be obtained from the Office of the undersigned, to whom Tenders, seeded in the envelope provided, must be returned not later than First Post on WEDNSDAY, 16th March, 1960.

Fully priced Bills, under separate cover if preferred, should be forwarded to this Office on the same day.

W. R. SHEPHERD, A.M.I.C.E., F.R.I.C.S.,
M.I.Mun.E., A.M.T.P.I.,
Borough Engineer and Surveyor.

Municipal Offices, W.14.

Municipal Offices, Sheen Lane, S.W.14.

BILLINGE-AND-WINSTANLEY DISTRICT COUNCIL. URBAN

ANNUAL TENDERS FOR MATERIALS.

TENDERS are invited for the SUPPLY of MATERIAL for the year ending 31st March, 1961, including farred Linestones Broken Stone, Bituminous Road Stone, Tar, Granite Chiopings, Concrete Flags, Kerbs and Edgings, Ashes, Dustbins, Hired Haulage and Road Rolling.

Schedules and Specification of Materials for tendering can be obtained from the Surveyor, Council Offices, Billinge, near Wigan.

Tenders must reach the undersigned not later than Norn on SATURDAY, 20th February, 1960, and must be delivered in a plain sealed envelope suitably endorsed.

ndorsed.

The Council does not bind itself to accept the owest or any Tender.

JOHN C. TAYLOR,
Clerk of the Council.

Council Offices, Billinge, nr. Wigan. 1st February, 1960.

BRIERLEY HILL URBAN DISTRICT

RESURFACING OF COUNTY ROADS.

RESURFACING OF COUNTY ROADS.

TENDERS are invited for the LAYING of approx.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.
7.420.45.

Civic Buildings. Brierley, Hill, Staffs.

CONTRACTS

FLINTSHIRE COUNTY COUNCIL. PUBLIC STREET WORKS ACT, 1892.

TENDERS are invited for MAKING-UP MOEL VIEW ROAD, GRONANT (260 lin. yd. approx.).
The Drawings may be inspected at the Office of the County Surveyor, E. W. W. RICHARDS, A.M.I.C.E., A.M.I.Struct.E., A.M.I.Mun.E., County Buildings, Mold, from whom Bills of Quantities, Specification, Form of Tender, etc., may be obtained upon payment of a bona-fide Tender and documents supplied. Tenders, in a plain sealed envelope endorsed 'Private Street Works,' to be delivered to the Clerk of the County Council not later than 12 Noon on MONDAY, 22nd February, 1960.
W. HUGH JONES.

County Buildings, Mold.

METROPOLITAN BOROUGH WANDSWORTH.

CONSTRUCTION OF MANHOLES.

TENDERS invited for CONSTRUCTION of 23 MAN-HOLES on existing SEWERS. Tender documents, obtainable from the Borough Engineer upon receipt of 52 2s. deposit (returnable on receipt of bona-fide Tender), must reach me by 10 a.m., 9th MARCH, 1960.

J. NOEL MARTIN, Town Clerk

Municipal Buildings. Wandsworth, S.W.18. METROPOLITAN BOROUGH OF WANDSWORTH.

BUILDING AND MAINTENANCE WORKS.

Applications are invited from contractors who wish to be placed on the Council's approved list of contractors who may be invited from time to time to the contractors who may be invited from time to time to the contractors who may be invited from time to time to the contractors of the contractors o

Municipal Buildings, Wandsworth, S.W.18.

METROPOLITAN BOR BOROUGH OF

PRECAST CONCRETE BRIDGE BEAMS.

TENDERS are invited for the SUPPLY of PRECAST CONCRETE BEAMS for the RECONSTRUCTION of the DUNTSHILL ROAD BRIDGE, which has a clear soan of 40ft. (41ft. 6in. skew span).

Tender documents, obtainable from the Borough Engineer, must reach me by 10 a.m., 9th MARCH. 1960.

J. NOEL MARTIN, Town Clerk.

Municipal Buildings. Wandsworth, S.W.18. Wandsworth, S.W.18. BOROUGH OF METROPOLITAN BOR

ASPHALT AND BITUMEN MACADAM SURFACING.

TENDERS invited for PROVIDING and LAYING 4,600yd. ROUGHCOAT ASPHALT and 58,000yd. BITUMEN MACADAM, om UNDERLAY where necessary. documents, obtainable from the Borough Enginer upon receipt of £2 2s. deposit (returnable on receipt of a bona-fide Tender, not subsequently withdrawn), must reach me by 10 a.m., 9th MARCH, 1960.

J. NOEL MARTIN. Town Clerk.

Municipal Buildings. Wandsworth, S.W.18.

METROPOLITAN BOROUGH OF

PUTNEY VALE CREMATORIUM AND CEMETERY.

Contractors wishing to TENDER for WORK of REBUILDING the CHURCH OF ENGLAND CHAPEL AT PUTNEY VALE CEMETERY should submit names to me by WEDNESDAY, 9th March, 1960, giving details of experience, plant and technical and supervisory staff available, together with names of two technical and two financial referees. Bills of Quantities will be issued to selected contractors in due course. Drawings may be examined at Office of Borough Engineer and Architect.

J. NOEL MARTIN,

J. NOEL MARTIN, Town Cler

Municipal Buildings, Wandsworth, S.W.18. DAER WATER BOARD.

SECOND INSTALMENTS OF PIPELINES-STAGE I.

PIPELAYING CONTRACTS NOS. 4, 5 AND 6.

The Daer Water Board invite TENDERS for the LAYING of STEEL PIPELINES with VIKING-JOHNSON COUPLINGS, in the County of LANARKSHIRE. The approx. lengths and locations are as follows:—CONTRACT No. 5.—Elvanfoot to Ablance, CONTRACT No. 5.—Elvanfoot to Ablance, CONTRACT No. 5.—Elvanfoot to Ablance, CONTRACT No. 6.—Douglas Moor Brocketsbrae, 8 miles of 42in. dia. Pipeline.

CONTRACT No. 6.—Douglas Moor Tank to Brocketsbrae, 8 miles of 42in. dia. Pipeline.

CONTRACT No. 6.—Douglas Moor Tank to Brocketsbrae, 8 miles of 42in. dia. Pipeline.

Tender documents for all or any of these contracts may be obtained on or after the 3rd February. 1960. at the Office of D. W. BUCHAN. Eag., County Water Engineer, 2856. GINNER, DEACON AND GOURLEY. Artillery House, Artillery Row, London, S.W.1. on payment of a deposit of Five Pounds, which will be refunded on receipt of a bona-fide Tender.

Each Tender, sealed in a separate plain envelope, and endorsed "Tender for Contract No. —," with the number 4, 5 or 6 inserted appropriately, should be delivered to my Office before Noon on 4th MARCH, 1960.

1960.
A further advertisement for two other major pipe-laying contracts, Nos. 7 and 8, will follow in a few weeks.
The Board do not undertake to accept the lowest or any Tender, nor will any expense in connection with tendering be defrayed, but tenderers must make themselves fully acquainted with the site and conditions

IAN V. PATERSON. Clerk to Daer Water Board.

Lanarkshire House,
191 Ingram Street,
Glasgow, C.1.
3rd February, 1960,

CONTRACTS

GOVERNMENT OF CEYLON.

AMENDED TENDER NOTICE.

AMENDED TENDER NOTICE.

The Chairman, Tender Board, Ministry of Works, Transworks House. Colombo, Ceylon, will receive Transworks House House Transworks House Hou

ender Forms and connected outcoments when the control of the contr

COUNTY BOROUGH OF EAST HAM. TENDER FOR LAUNDRY.

TENDERS are invited for the CARRYING OUT of LAUNDRY WORK for the Council's various Establishments for one year commencing 1st April, 1960. Forms of Tender on application to Town Clerk. Town Hall, East Ham, Ed. envelopes, to be delivered to The Worshipful the Mayor, Town Hall, East Ham, E.6, not later than 12 Noos on MONDAY, 29th February, 1960. The Council does not bind itself to accent the

6. not later than ...

bird itself to accept the west or any Tender.

R. H. BUCKLEY,
Town Clerk.

COUNTY BOROUGH OF ROTHERHAM. CONTRACT FOR THE SUPPLY OF DUSTBINS FOR THE YEAR 1960-61.

TENDERS are invited for the SUPPLY of 2.500 GALVANISED DUSTBINS, 314 cu. ft. capacity, weighing, complete with lid, 28lb., and complying

2.500 GALVANISED DUSTBINS, 31s cu. ft. capacity, weighing, complete with lid, 28lb., and complying with B.S.S.792 of 1947.

Form of Tender and Conditions of Contract may be obtained from the Borough Engineer, Municipal Cites, Rotherham, on application and the contract of the contract o

JOHN S. WALL, Town Clerk.

BOROUGH OF GUILDFORD.

PARK BARN HOUSING SITE.

FOOTPATHS AND FORECOURTS.

TENDERS are invited for the FOLLOWING TWO
CONTRACTS:

(a) The Laying of approx. 1,320 lin. yd. of
2in. x 10in. Kerb; 1,460 lin. yd. of
2in. x 6in. Edging Kerb: Construction of
7,400 sq. yd. of Tarmacadam Footpaths;
3,800 sq. yd. of Garage Forecourts in Hardcore and Bituminous Macadam, together
(b) Grading, Freparation and Seeding of 1.7
acres of House Forecourts.

Tender
Surveyor, Municipal Offices, High Street, Guildford,
Surveyor, Municipal Offices, High Street, Guildford,
Tenders to be submitted by Mone or the Con-

Tenders to be submitted by Noon on the 2nd MARCH, 1960. HERBERT C. WELLER, Town Clerk.

4th February, 1960.

URBAN DISTRICT COUNCIL OF MANSFIELD WOODHOUSE. ANNUAL TENDER FOR STORES FOR THE YEAR ENDING 31ST MARCH, 1961.

TENDERS are invited for the SUPPLY of the FOLLOWING MATERIALS:—

TENDENS

Ref. No.

(1) Tarmacadam.
(2) Bituminous Macadam.
(3) Tar for Road Dressings.
(4) Broken Siag and Granite for Tar Spraying.
(5) Precast (Granite) Concrete Kerbs.
(6) Precast (Granite) Concrete Paving Flags.
(7) Scavenging Brushes and Rotary Sweeper Brushes.

Specified from the Surveyor and Engineer, Council Offices, Manor House, Mansfield Woodhouse (quote reference number). Tenders must be delivered to the undersigned not later than Noon on SATURDAY, the 27th February, 1360.

READ JOHNSON.

Clerk of the Council,

Council Offices, Manor House, Mansfield Woodhouse, 2nd February, 1960.

SUPPLEMENT

BOROUGH OF ACTON.

SURFACE DRESSING HIGHWAYS.

The COUNCIL invite TENDERS for the SURFACE DRESSING of about 120,000 sq. yd. of CARRIAGE-WAYS. Forms of Tender may be obtained from the Borough Engineer, and must be returned to the TOWN CLERK. Town Hall, Acton, W.3. in sealed envelopes, endorsed "Tender—Surface Dressing," by 26th FEBRUARY, 1980.

CITY AND COUNTY OF THE CITY OF

BLACON TRUNK SEWERS.

TENDERS, on a FIXED-PRICE BASIS, are invited from experienced contractors for the CONSTRUCTION OF TRUNK SEWERS in the BLACON DISTRICT of Chester.

The Works comprise the Supply and Laving of

of TRUNK SEWERS in the BLACON DISTRICT CRESTER.

Chester.

Chester

OF BIRMINGHAM. CITY

TO PUBLIC WORKS CONTRACTORS.

The Public Works Committee Invite TENDERS on a FIXFD-PRICE BASIS for a MEASURE and VALUE CONTRACT for the Maintenance of loints in Concrete-finished Carriaceways in Various Roads in the City. Cooles of the Soecification, Bill of Quantities and Form of Tender may be obtained on payment of £2 2s. at the office of SIR HERBERT J. MANZONI, City Engineer and Surveyor, Civic Centre, Birminoham, 1, to whom all cheaues should be made payable. The denosit will be returned on receipt of a bona-fide Tender.

Engineer and burvers.

To whom all cheques should be many to whom all cheques should be many to whom all cheques to whom all cheques to the returned on receipt of a bona-nue render.

Tenders, enclosed in the envelopes provided for the purpose, must be sealed and delivered to the Town Clerk's Office (Room B.21) Council House Birming-Clerk's Office (Room B.21) Council House Birming-Clerk's Office (Room B.21) Council Lower be controlled to the controlled to the controlled to the controlled to the controlled the co

Council House, Birmingham, 1.

BURTON LATIMER URBAN DISTRICT

BAKEHOUSE LANE HOUSING SITE.

BAKEHOUSE LANE HOUSING SITE.

The above Council is prepared to receive TENDERS from suitably experienced contractors for the CONSTRUCTION of approx. 500 sq. vd. of Tanacadam Road, 220vd. of Gin. 40 la. Concrete Tube of Gin. 50 la. Concrete Tube Ordinal May 10 la. Concrete Tube Ordinal Gin. 50 la. Concrete Tube Ordina

the Soccification and Bill of Quantities may be obtained on payment of a deposit of Two Guineas, which will be refunded on receipt of a bona-fide Tender.

Tenders, on the form supplied and in the envelope provided, are to be delivered to the understaned not later than 10 o'clock in the Forencon of 8th MARCH, 1960.

The Council does not bind itself to accept the lowest or any Tender.

C. E. LANSOM.
Clerk to the Council.

Council Offices, Burton Latimer, Kettering, Northants.

UTTOXETER URBAN DISTRICT

SEWERAGE AND SEWAGE DISPOSAL

NORTH END OUTFALL SEWER.

CONTRACT NO. 1.

CONTRACT NO. 1.

TENDERS are invited from evnerienced public works contractors for the CONSTRUCTION of aponex. 1,000 lin. vd. of 91n. and 61n. dia. SPUN-IRNN of 1,000 lin. vd. of 91n. and 61n. dia. SPUN-IRNN of 1,000 lin. vd. of 12n. dia. CONCRETE PIPE SEWERS. Coether with Pirk Mancholes and other incidents downton. At UTTOXETER. The General Conditions of Contract and Specification. Bills of Quantities and Form of Tender may be obtained from the Fencineers. MESSRS. WILLCOX. RAIMES AND MARSHALL. 33 Great Charles Street. Birminnham. 3, where the Drawlines may be insocted. Birminnham. 3, where the Drawlines may be insocted. Grawn in favour of the Uttoweter University of Council Sa a deposit which will be refunded after the receipt of a bona-fide Tender, supported by priced Rills of Countities if required, and the return of all documents.

The Tender is to be delivered, in the envelope provided, to be understaned not later than 12 of clock The Council do not bind by of March. 1960.

The Council of not bind by of March. 1960.

The Council of the Street of Street Council. Offices.

Council Offices.

Council Offices.

Council Offices, The Old Bank House, 72 High Street, Uttoxeter.

S T E V E N A G E DEVELOPMENT

CIVIL ENGINEERING CONTRACTS.

CIVIL ENGINEERING CONTRACTS.

Applications are invited from civil engineering contractors who wish to be considered for invitations to TENDER for civil engineering works to be 550,000 or over.

The works include: (1) ESTATE DEVELOPMENT: (2) MAIN DRAINAGE: (3) MAIN ROADS. Contractors should state the types of work in which they are interrested and send with their applications, endorsed "Engineering Contractors," should be submitted to reach the CHIEF ENGINEER not later than 5th March, 1960.

Stevenage Development Corporation, Aston House, Near Stevenage, Herts.

CONTRACTS

COUNTY BOROUGH OF HASTINGS. COLLEGE OF FURTHER EDUCATION—FIRST INSTALMENT.

Contractors are invited to submit TENDERS for the ERECTION of the ABOVE, comprising Single-storey Workshop Block and Three-storey Main Block (part of ultimate seven-storey building) for which Piling and Site Levelling has already been carried out. Bills of Quantities and Forms of Tender will be available late February, and may be obtained from the Borough Engineer, 37 Wellington Square Hastings, on receipt of £5 5s., which will be returned Sealed Tenders, in an envelope to be provided, should be delivered to the underslenden not later than 10 a.m. on MONDAY, 28th March, 1960.

The Corporation does not bind itself to accept the lowest or any Tender.

N. P. LESTER,

N. P. LESTER, Town Clerk.

Town Hall, Hastings

BOROUGH OF RAWTENSTALL.

BURNLEY ROAD, LOVECLOUGH.

RESURFACING AND RECONSTRUCTION.

TENDERS are invited for the LAYING of some 3.117vd. super. of 21sin. SINGLE-COURSE HOT ROLLED ASPHALT. also for SUPERLELYATION WORKS in PREMIXED WATERBOUND MACADAM, the surfacing to be of some 110 tons of Bituminous Macadam Base Course and 1.550 super. vd. of 11sin. Hot Rolled Asphalt Wearing Course. Ontract documents may be obtained from the Contract documents may be obtained from the Stall. Rossendale, Lancs. Scaled Tenders, in the envelope provided, must be returned to the undersigned not later than 12 Noon on MONDAY, the 29th February, 1960.

(Signed) C. CAMPPELL.

(Signed) C. CAMPBELL, Town Clerk

Town Hall, Rawtenstall, Rossendale, Lancs, Rossendale, Lancs, Path January, 1960. BOROUGH OF LOUGHBOROUGH.

INDUSTRIAL SITE-DERBY ROAD.

INDUSTRIAL SITE—DERBY ROAD.

FIXED-PRICE TFMDERS are Invited for approx.
600 lin. vd. of SURFACE WATER SEWERS, 450 lin.
vd. of FOUL SEWERS, together with approx. 3,600
super. vd. of Carriageway, a Reinforced Concrete
Pumping Station, and other incidental works.
Drawines and General Conditions of Contract may
titles and Form of Tender may be obtained from the
undersigned, on the deposit of Two Guineas, which
will be returned on the receipt of a bona-fide Tender
not subsequently withdrawn.
Tenders, to be made out so the form supoiled.
Tenders, to be made out so the form supoiled.
Tenders, to be made out so the form supoiled.
ARTHUR USHER, Town Clerk, Southfields, Loughhorough, not later than Noon on FRIDAY, 11th
MARCH, 1960, N. S. ATES, ALTER ALTER SEE MARCH.

), not later than 1960. 1960. JOHN S. BATES, A.M.I.C.E., M.I.Mun.E., A.M.T.P.I., Borough Engineer and Surveyor.

Southfields, Borough Engineer and Surveyor. Louehborough, 4th February, 1960. BOROUGH OF RAWTENSTALL.

ANNUAL TENDERS, 1960-61.

ANNUAL TENDERS, 1960-61.

TENDERS are invited for the SUPPLY of the UNDERMENTIONED MATERIALS for the year ending 31st of the Year ending 31st of the Year Cold Asohalt.

(2) Coated Macadam for Cold Laying.
(3) Sand and Broken Stone.
(4) Precast Concrete Kerbs and Flags.
(5) Salt Glazed Ware Ploes and Flittings.
(6) Manhole Covers and Frames.
(8) Saln. and 1-sin. Roadstone Chippings.
(9) White Disinfectant Fluid.
(10) B.S.S. Galvanised Dustbins.
Contractors desirous of tendering should apply for full particulars to the Borough Engineer and Surveyor, Town Hall, Rawtenstall, in respect of Items (1) to Office, Kay Street, Rawtenstall, in respect of Items (9) and (10). Completed Tenders, in plain sealed envelopes, endorsed "Annual Tenders," must be received by the undersigned not later than SATUR-DAY, 5th March, 1960. COLIN CAMPBELL,

URBAN

Town Hall, Rawtenstall, Rossendale, Lancs, 3rd February, 1960. SUNBURY - ON - THAMES DISTRICT COUNCIL.

TENDERS are Invited by Noon on MONDAY, 7th March, 1960, for the CONSTRUCTION of approx. 850yd. of 9in. dia. CAST-IRON SEWER with 6in. 87anch Connections, Pumping STATION, and approx. 100yd. of 6in. dia. CAST-IRON PUMPING MAIN. Documents relating to the scheme are in course of the control of

T. WATTS. Clerk of the Council.

Council Offices, Sunbury-on-Thames

URBAN DISTRICT COUNCIL OF CORBY. HOOD COURT SEWERAGE.

TENDERS are invited for the CONSTRUCTION of \$30vd. of 6in. dia. FOUL and SURFACE WATER SEWERS, with Manholes and ancillary Works. Contract documents may be obtained from the undersigned unon payment of a deposit of \$1 (cheques heing made payable to the Urban District Council of Corbb), which will be refunded on receipt of a bonafod Tender, Drawings may be inspected at the Council Offices during normal office hours. Tenders should be delivered to the undersigned in the envelope provided not later than 9 a.m. on FRIDAY, 4th March, 1960. B. BLACKALL.

G. B. BLACKALL. Clerk of the Council.

Council Offices, Corby, Northants. 3rd February, 1960.

CONTRACTS

NORFOLK COUNTY COUNCIL

AERIAL SURVEYS.

AERIAL SURVEYS.

TENDERS are invited for the AERIAL SURVEY of approx. 18 Miles of HIGHWAY, including the Supply of Distortion-free Aerial Photographs. The Survey Plans are to be to a scale of 1:500 with a guaranteed accuracy such that 95 per cent. of all detail shall be plotted within 0.5 mm. of their correct co-ordinate position. Miles of Contract. Specification of Contract. Specification of Contract and the County Surveyor, County Offices, Thorpe Read Norwich, on payment of a deposit of 55, which will be returned on receipt of abona-fide Tender not subsequently withdrawn. Tenders, in the envelope provided, should be submitted to the undersigned not later than 12 Non on 29th FEBRUARY, 1960. F. P. BOYCE,

F. P. BOYCE, Clerk to the County Council.

County Offices, Thorpe Road, Norwich (NOR 47A). 2nd February, 1960.

COUNTY BOROUGH OF IPSWICH.

SUPPLY OF PAINT.

TENDERS are invited for the SUPPLY of approx. 2,500 nalions of PAINT during the year commending 1st April, 1950.
List of approved brands, together with Particulars and Forms of Tender, can be obtained from the Borouch Engineer and Surveyor, 19 Tower Street. In the second of the second part of the

or mark to indicate the format of the Supoly of Paints," must be for the Supoly of Paints," must be for the Supoly of Paints," must be for the Supoly of Paints, and the Supol

STEPNEY METROPOLITAN BOROUGH

TENDERS are invited for the FOLLOWING WORKS:
Schedule "A."—The Removal of surplus Sooil
and/or Hardrore from Demolished Buildings
and Constructional Works.
Schedule "B."—The Removal of surplus Spoil
and Constructional Works.
Schedule "B."—The Removal of surplus Spoil
works, Foundations and/or Excavations.
Forms of Tender, with Conditions, etc., obtainable
from the Borough Engineer and Surveyor, 227/23.
Commercial Roaf, E.1, upon payment of deoosit of
Two Guineas. Closing date for Tenders, 29th FEP
RUARY, 1950.

Municipal Offices, 227/233 Commercial Road, E.1.

STEPNEY METROPOLITAN BOROUGH

TENDERS are invited for the FOLLOWING WORKS:—

Supplying and Laying Asphalt Paving, as required, for a period of 12 months from the 1st April, 1950 ditlone, etc., obtainable from the Tender with the second of 12 months from the first higher and Surveyor, 227-233 Commercial Road, E.1, upon payment of a deposit of Two Guineas. Closing date for Tenders, 29th February, 1960. WILFRED REEVE. Town Clerk.

Municipal Offices. 227-233 Commercial Road, E.1. C I T Y O F L E E D S.

WATERWORKS DEPARTMENT.

WATERWORKS DEPARTMENT.

FIXED-PRICE TENDERS are Invited for the CONSTRUCTION, COMPLETION and MAINTENANCE of approx. Two Miles of Zalin, dia, CAST-IRON MAIN and other works connected therewith, from SPEN GARDENS, WEST PARK, Leeds, to TONGUE LANK, MEANWOOD, Leeds. The Contract does not include the Supply of Cast-Iron Ploes and Fittings, Soecification and Contract Drawings, Rill of Quantities and Schedule of Rates and Prices, together with General Conditions of Contract and Porms of Indian and Agreement, may be obtained and Porms of General Conditions of Contract and Porms of Will be refunded following the receipt of a bona-fide Fender and the return of all Contract documents. The whole of the Contract documents with Bill of Cuantities, Schedule of Rates and Prices and Form of Tender, duly completed, must be enclosed in a plain sealed cover addressed to the Town Clerk endorsed "Tender for 24in, Main," and be delivered at the Town Clerk's Office, Room 57, Cluc Miles, in the Corporation does not bind itself to accept the lowest or any Tender.

KENNETH L. FORSTER, M.I.C.E.

west or any Tender.

KENNETH L. FORSTER, M.I.C.E..
General Manager and Engineer.
Civic Hall,
Leeds, 1.
3rd February, 1960.

ROMSEY AND STOCKBRIDGE RURAL

ROWNHAMS SEWERAGE-STAGE 1.

FIRM-PRICE TENDERS are Invited for the CONSTRUCTION of annov. 1,500-vd. of 6in. and 9in. dia. SPUN-CONCRETE SEWER, with Manholes. Ventilating Shafts. Lateral Connections, and other works incidental thereto, in the Parlsh of NURSLING AND ROWNHAMS, Hampshire. Plans may he inspected, and a conv of the General Parls of Tender may be obtained from the Council's Consulting Engineers. MESSRS. LEMON AND RUSCHION, 100 of 100 of

The Council do not bind themselves to accept the lowest or any Tender. W. A. TANNER. Clerk of the Council.

Council Offices, Duttons Road, Romsey, Hants. 3rd February, 1960.

MERIONETH COUNTY COUNCIL. HIGHWAYS AND BRIDGES DEPARTMENT.

TENDERS are invited for the SURFACE DRESSING of TRINK and COUNTY HIGHWAYS during the year concerning 1st April, 1960.

Tender Forms, Specification and Conditions of Contract may be obtained by sending a stamoed addressed envelope to the County Surveyor, County Offices, Penarlag, Doligellau bilan sealed envelope, Tenders, endings Surface Dressing, should reach the total county Offices, Penarlag, Dolgellau, bilan collater than MONDAY, the 22nd February, 1960.

FLINT BOROUGH COUNCIL.

PEN GOCH HOUSING ESTATE— ADVANCE PREPARATION OF ROADS, SEWERS AND WATER MAINS.

TENDERS are invited for the CONSTRUCTION of WORK'S comprising approx. 7.350 super. vd. of Mardcore Roads, inc. Contruction of Kerb Rare and 2.450 and vd. 21in. to 9in. Foul and Surface Water Sewers, including P.C. and Brickwork Manholes, Road Guilles and incidental Works.

Copies of the Specification, Bill of Quantities and Form of the Specification, Bill of Quantities and Form of Marchael Works. A specification of the Borough of the Specification of the

Town Hall.
Filint.
3rd February, 1960.

BOROUGH OF TOTTENHAM.

RECONSTRUCTION OF PART OF CLYDE ROAD, N.15.

TENDERS are invited for the RECONSTRUCTION of CLYDE ROAD from Town Hall Approach Road to the Railway Bridge, an area of 1.356 sq. yd. The carriageway only is to be reconstructed with 8in. of lean-mix concrete and 3in. of bitumen macadam. Firms wishing to tender can obtain contract documents (on deposit of £2) from the Boroqueh Endineer. Town Hall, Tottenham. W.15. Tenders shall be returned not later than WEDNESDAY, 24th February. returned not later than WEDNESDAY, 24th February, 1960.
The Council do not undertake to accept the lowest or any Tender.

M. LINDSAY TAYLOR, LL.R., Town Clerk

BOROUGH OF SWINTON AND

BOROUGH SURVEYOR'S DEPARTMENT.

TENDERS are invited for the ERECTION of TWO
TIMES AND THE STATE OF THE

BOROUGH OF HENDON.

TENTERDEN CLOSE, HENDON.

TENTERDEN CLOSE, HENDON.

The Rornugh Council Invites TENDERS for the MAKING-UP of TENTERDEN CLOSE, N.W.4. under the Highways Act, 1959, Code of 1892, including Kerbing, Hardrone Foundation, Carriageway Surfacing and Footway Construction.

The Form and Conditions of Tender, Specification The Form and Condition of Tender, Specification will be issued by and Plans may be inspected at the offices of the Borough Foundation, Carriageway Surfacing and Surveyor, to whom applications for the documents must be made not later than SATURDAY the 20th February, 1960, accompanied by a deposit of £2 2s., which will be returned on received to the production of the surface o

Town Hall, Hendon, N.W.4.

PORTLAND URBAN DISTRICT COUNCIL. ASPHALT SURFACING.

TENDERS are invited for LAYING of 2.545 sq. vd. of RITUMINOUS MACADAM and FINE GRADE ASPHALT SURFACING with Prepared Foundations, on the Completed Section of a New Sec Wall and the Specific of the Completed Section of a New Sec Wall specific of the Completed Section of a New Sec Wall specific of the Complete Section of the Section of the Complete Section of the Section of the Complete Section of the Section of the Section of the Complete Section of the Compl

GIPPING RURAL DISTRICT COUNCIL. CLAYDON AND GREAT BLAKENHAM SEWERAGE SCHEME.

CLAYDON AND GINEAT BLANCHTAM
SEWERAGE SCHEME
TENDERS are Invited for the CONSTRUCTION,
TESTING and MAINTENANCE of SPUN-IRON,
CONCRETE and GLAZED STONEWARE SEWERS
THREE OUMPING STATIONS. ASBESTOS-CEMENT
INCIDENTAL STATIONS. ASBESTOS-CEMENT
Incidental thanks, MANHOLES and all other Works
Incidental thanks, MANHOLES and Incidental thanks, MESSRS.
LEMON AND BLIZARD, 59 TUTON Street, Westminister, S.W.I. upon payment of a deposit checup
will be returned all documents, The Form of Tender
and the return of all documents, The Form of Tender
and a Priced Bill of Ouantities must be delivered in
a sealed envelope endorsed "Tender for Claydon and
Grott Riskenham Sewerane Scheme". In the under
Grott Riskenham Sewerane Scheme". In the under
working hours at the offices of the Consulting
Enclasers of the Council.
The Council do not bind themselves to accept the
lowest or any Tender

W. M. BENNETT.

Council Office.

Needham Market.

Needham Market.

CONTRACTS

EAST SUFFOLK COUNTY COUNCIL.

CONTRACT NO. 20.

CONTRACT NO. 20.

TENDERS are invited for the SUPPLY HEATING and SPRAYING of sprox. \$20,000 GALLONS of TAR, TAR-COMPOUND and CUT-BACK BITUMEN. (This is the total for the whole county, divided into five areas. Tenders will be considered for the total, or use or more areas.) The County Council will undertake the work of preparing the road for surface dressing and the provision, application and, where dressing and the provision, application and, where will be subject to order by the county council will be related to the provision of price.

Specification, Form of Tender with Appendix to the Standard Conditions, may be obtained from the County Surveyor, County Hall, loswich, useen payment of Two Guineas Geosal, which will be refunded after county Surveyor, county Hall, loswich, useen from must be delivered to the undersioned not later than 10 a.m. on MONDAY, 29th February, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

G. C. LIGHTFOOT,

Clerk of the County Council.

County Hall. Ipswich. 4th February. 1960.

METROPOLITAN BOROUGH

SURFACE DRESSING.

TENDERS invited for SURFACE DRESSING approx. 121,000 so. vd. of CARRIAGEWAY with HOT CUT-BACK BY STORM STORM

METROPOLITAN BOROUGH

REFUSE CONTAINERS.

TENDERS Invited for SUPPLY of 11₄ cu, vd capacity Scammell Type REFLISE CONTAINFRE AND SURVEYOR, et alia from BOROUGH ENGINEER AND SURVEYOR, CONTAINS CONTAINS CONTAINS Closing date, 20th FEBRUARY, 1950.

BOROUGH OF CHATHAM. RESURFACING OF LUTON HIGH STREET AND MAIDSTONE ROAD (PART).

TENDERS are invited for the ABOVE WORKS, comorising the Mechanical Laving of Fine Cold Asohalt, Julin thick to approx. 3,580 SM, Jul. In LUTON MIGH STREET, and 3,865 sq. yd. In MAIDSTONE ROAD.

ROAD.

Forms of Tender, Specification and Bills of Ouantities can be obtained from, and General Conditions of Tender and Contract can be seen at, the office of MR. I. A. T. RICHARDS, Borough Englines and Surveyor. Town Hall, Chatham, on payment of a receipt of a bona-fied render or the return of all documents.

rements must be delivered to the undersigned by Tenders MONDAY, 22nd February, 1960.
The Council do not bind themselves to accept the west or any Tender.

ROWLAND NEWNES
Town Clerk.

ROROUGH OF HAMPSTEAD. PRINTING.

TENDERS are Invited for PRINTING COUNCIL AGENDA, MINUTES, INDEX and ELECTION FORMS for one or three years from 1st April, 1960.
Tender Forms and Conditions obtainable from the understanded.
Closing date for Tenders: 26th FEBRUARY, 1960.
The Council is not bound to accept the lowest or any Tender.

Town Hall, Hamosfead, N.W.3. 1st February, 1960.

PLYMOUTH CITY WATERWORKS.
TFNDERS are invited for the SUPPLY of 4,60,00 of 24in, dia. CONCRETE LINED SPUN-180N PIPPS and Soecial Castings to 8.5,5,1711 : 1958. Class C. Forms of Tender and details from the Water Enders to be a concerned by the TOWN CLERK, or Towns of the Country of the Coun

DEBEN RURAL DISTRICT COUNCIL.

WATER SOFTENING PLANT.

PETTISTREE PUMPING STATION.

TENDERS are invited from specialist firms for the JPPLY and INSTALLATION of WATER SOFTENING LANT at the COUNCIL'S PUMPING STATION at

PLANT at the COUNCIL'S PUMPING STATION at PLANT at the COUNCIL'S PUMPING STATION at PLANT at the Council State of treating raw water having a total hardness of 430 n.o.m. and reducing this to a resultant distributed hardness of 150 n.p.m. at flow rates of up to 22,000 gallons per hour.

Croles of the chained from the Engineer and Surveyor, Council Offices, Melton Hill. Woodbridge-Suffolk upon deposit of £2 2s. which will be refunded an receipt of a bona-fide Tender.

Tenders must be delivered to the undersigned in the chardness of the chained from the Engineer and the chardness of the chardness of the council does not bind itself to accept the lowest or any Tender.

T. DYMOND HOCKINGS.

Clerk of the Council.

CAERNAR VONSHIRE EDUCATION

Ruilding contractors wishing to TENDER for (a) NEW KITCHEN and DINING ROOM at YSGOL DYFFRYN NANTLE. PENYGROFS. and (h) EXTENSIONS to BOTWNNOG GRAMMAR SCHOOL. Are remisshed to send their names to the DIRECTOR OF EDUCATION. Education Offices, Caernarvon, not later than the 16th FERULARY, 1960. accompanied by a dennit chemie of \$2.25. for each lob, pawhife of a hona-fide Tender, it is anticloated that the Bills of "antities will be available at the end of February, 1960.

CONTRACTS

STAFFORDSHIRE COUNTY COUNCIL. HIGHWAYS ACT. 1959-PRIVATE STREET WORKS.

HIGHWAYS ACT, 1959—PRIVATE STREET WORKS.
TENDERS are invited for the MAKING-UP of THREE PRIVATE STREETS:—

(1) Adamthwaite Drive, off Uttoxeter Road, Blythe Bridge (length 437vd.).

(2) Bidgeway Drive, off Grindley Lane, Blythe Bridgeway Drive, off Grindley Lane, Blythe Gridge (length 437vd.).

(3) Queen Street, off Wereton Road, Audley (length 81yd.).
The Work Includes Excavation, Providing Two Layers of 2in. Broken Stone to 6in. depth isin on 3in. Ashes, and Surfacing of 3in. Bituminous Macadam, P.C. Condidation of Stoneware Surface Water Drains with Brick Manholes and Guilles.

Applications for Contract documents should be made to the undersigned and must be accompanied by a don receipt of a bons-fide Tender or return of the Contract documents before the closing date.

Completed Tenders should reach the undersigned not later than 10 a.m. on 3rd MARCH, 1960.

Cunty Buildings, Clerk of the County Council.

County Buildings,

County Buildings, Stafford.

SURREY COUNTY COUNCIL HIGHWAYS AND BRIDGES DEPARTMENT.

TENDERS are invited for REKERBING, MAKINGUP SUPERELEVATION and RESURFACING in 11-in.
SINGLE COURSE BITUMINOUS MACADAM on the
UNDERMENTIONED SECTIONS of ROAD:—
Reigate-Dorking Road (A.25).—Between Buckland and Betchworth, approx. 1,100 lin. yd.
London-Brighton Trunk Road (A.23).—Between
The Chequers and Cross Oak Lane. Horley,
approx. 1,200 lin. yd. (including the Consection of a Bus Layby in Concrete).
London-Bross and Section Section Country
Hindhead Cross Roads.
Particulars and Forms of Tender, returnable by
Pirst Post, 22nd FEBRUARY, 1950, Obtainable from
COUNTY ENGINEER, County Hall, Kingston-uponThames.

BOROUGH OF PORT TALBOT. COMPLETION OF ROADWORKS AT LITTLE WARREN.

COMPLETION OF ROADWORKS AT LITTLE WARREN.

TENDERS are invited for ROAD COMPLETION
WORKS in connection with the ABOVE HOUSING
SITE, comprising the following:—
5,000% sup. Road Surfacing.
2,000% sup. Road Surfacing.
2,000% sup. Road Surfacing.
Drawings may be insocred at the Municipal Buildings, Port Talbot, and Specification, Bills of Quantities and Form of Tender may be obtained upon application to the Borough Engineer, Mr. G. V. GRIFFITHS, A.M.I.C.E., on payment of a deposit of \$2 2s., which will be returned on receipt of a bona-fide Tender and the return of all documents.

Tenders, in plain envelopes, endorsed "Completion of Roadworks—Little Warren," to be received by the of Roadworks—Little Warren, to be received by the office of the property of the completion of Roadworks—Little Warren, to be received by the or not provided the completion of Roadworks—Little Warren, to be received by the or not provided the provided that the provided the provided that the provided the provided that the provided that

W. KING DAVIES, Town Clerk

Municipal Buildings,
Port Talbot.
3rd February, 1960.

BOROUGH OF WORKSOP. ANNUAL CONTRACTS.

TENDERS are invited for the SUPPLY of the FOLLOWING ITEMS during the year commencing 1st April, 1960.—

TENDERS are Invited Oldring the year st April, 1960- Bricks.

(2) Bituminous Emulsions.
(3) Rebristling of Sweeper Brushes.
(4) Cement.
(5) Concrete Kerb and Flags.
(6) Sand and Gravel.
(7) Dry, Tarred and Bituminised Slag.
(8) Fitching and Binding Stone.
(9) Fitching and Binding Stone.
(10) Hire of Lorries.
(11) Salt.
(12) Liquid Chlorine.
(13) Stoneware Pipes and Fittings.
(14) Coal.
(15) Soiled or Rock Salt.
(16) Soiled or Rock Salt.
(17) Truck-mixed Concrete.
(18) Premixed Waterbound Macadam.
(19) Overails.
(20) Red Shale.
Tender Forms may be obtained from the Borougi-Engineer, Park House, Worksoo.
Closing date for Tenders, 25in FEBRUARY, 1960
Closing date for Tenders, 25in FEBRUARY, 1960
Closing date for Tenders.

Town Hall, Worksop.

CITY OF MANCHESTER. PAINTING OF STREET LIGHTING STANDARDS.

TENDERS are invited for the CLEANING and PAINTING of approx. 3.800 STEEL STANDARDS and 2,700 CAST-IRON PILLARS in Manchester. The work is to be divided into three contracts. Tender documents (returnable by 9.30 a.m., 29th FEBRUARY, 1980) from the CITY SURVEYOR, Town Hall, Manchester, 2.

CITY OF MANCHESTER.

DIVERSION OF THE RIVER MEDLOCK—
DEMOLITION OF BUILDINGS IN THE
LONDON ROAD AREA.

TENDERS are invited for the DEMOLITION of DWELLINGS, SHOPS and other PREMISES near the Junction of LONDON ROAD and DOOMING REET. Tender documents freturnable by 29th FEBRUARY, 1900 from the CITY SURVEYOR, Town Hall, Manchester, 2.

FLINTSHIRE EDUCATION COMMITTEE.

PHYSICAL EDUCATION EQUIPMENT.
TENDERS are invited for the SUPPLY of the FOLLOWING:
(1) Physical Education Equipment for Primary

FOLLOWING:

(1) Physical Education Equipment for Primary and Secondary Schools.

(2) Agility Apparatus for Physical Education in Primary Schools.

Form of Tender, available from the DIRECTOR OF EDUCATION, County Education Offices, Mold, Filint-shire, should be returned in sealed envelopes, suitably endorsed, by not later than Noom on FRIDAY, the 26th February, 1960.

SUPPLEMENT

DENBIGHSHIRE COUNTY COUNCIL. HOT ROLLED ASPHALT SURFACING AT ABERGELE.

HOT ROLLED ASPHALT SURFACING AT ABERGELE.

FIXED-PRICE TENDERS are invited from contractors experienced in this class of work for the SURFACING of approx. 5,000 so. yd. of CARRIAGEWAY with HOT ROLLED ASPHALT.

Tender documents may be 6 Clwyd Street, Ruthin. The contract of the contract

County Offices, Ruthin.

COUNTY BOROUGH OF OLDHAM.

TENDERS are invited for the SUPPLY and DELIVERY to the Corporation's arious depots of PETROL, DIESD LAND COLL THE ACTOR AND COL

Town Hall, Oldham. 1st February, 1960.

URBAN DISTRICT COUNCIL OF

DEVONSHIRE ROAD (LAINDON) HOUSING SITE-

TENDERS are invited for the ABOVE WORKS.
mprising 1.250 sq. yd. of Tarmacadam Footway
d 860 lin. yd. of Concrete Edging, together with

TENDERS are invited for the Advise Moving Comprising 1,250 s. vd. of Tarmacadian Tootboay and 860 li. vd. of Concrete Edging, together with Experience of Contractors wishing to Tender should apply to the COUNCIL'S ENGINEER AND SURVEYON 1980, the application to be accompanied by a deposit of £2 2s. (Two Guineas), which will be refunded on receipt of a bona-fide Tender not subsequently without the council close not bind itself to accept the lower or any Tender.

EGHAM URBAN DISTRICT COUNCIL.

MAINTENANCE OF HIGHWAYS, ETC.

TENDERS are invited in connection with the EXECUTION of MINOR MAINTENANCE ITEMS on HIGHWAYS, etc., during the year ending 31st March, 1961.

A copy of the Schedule of Rates and other contract documents may be obtained from the Engineer and surveyor on submission of a deposit of \$2 2s., which will be returnable on the receipt of a bona-fide Tender by Noon on Sth MARCH, 19 of a bona-fide Tender by Noon on Sth MARCH, 19 SMITH, Clerk of the Council, Offices.

Council Offices, High Street, Egham, Surrey.

WIRRAL URBAN DISTRICT COUNCIL. RELIEF SEWER-MEADWAY, HESWALL.

FIXED-PRICE TENDERS are invited for SUPPLYING and LAYING approx. 77 in. yd. of 15in. dia GLAZED STONEWARE PIPES, 75 lin. yd. of 12in. dia GLAZED STONEWARE PIPES, 128 lin. yd. of 9in. dia GLAZED STONEWARE PIPES, 128 lin. yd. of 9in. dia chazeb STONEWARE PIPES, 129 cether with ancillary

GLAZED STONEWAKE PIPES, together with ancillary works, works, surprised to the property of the Conditions of Contract and Contract Drawings may be inspected.

Tenders, in plain sealed envelopes, endorsed "Relief Sewer—Meadway, Heswall," must be delivered to the undersigned not later than 10 a.m. on FRIDAY, 11 The Council does not bind itself to accept the lowest or any Tender.

W. F. ROBERTS.

W. F. ROBERTS, Clerk of the Council.

WOKING URBAN DISTRICT COUNCIL. BOUNDARY FENCING INDUSTRIAL SITES.

TENDERS are invited for ERECTION of approx.
1,400yd. CHAIN LINK FENCING at OLD WOKING
and MONUMENT BRIDGE INDUSTRIAL SITES.
Tender documents from Engineer and Surveyor on
payment of Two Guiness deposit, refundable only on
receipt bona-fide Tender, not subsequently withdrawn.
oc.LERK OF COUNCIL, Council Offices, Guildford
Road, Woking, by 8.45 a.m., 22nd FEBRUARY, 1960.

THORNBURY RURAL DISTRICT

SITE PREPARATION WORKS AND ERECTION OF DWELLINGS AT UPPER BATH ROAD AND CHAPEL STREET, THORNBURY.

DWELLINGS AT UPPER BATH ROAD AND CHAPEL STREET, THORNBURY.

The Council Invite TENDERS for SITE PREPARATION WORKS and ERECTION to DWELLINGS on the ABOVE-MENTIONED SITE (36 units of accommodation).

Tender documents for site preparation works and erection of dwellings are obtainable separately from the Council's Architects. MESSRS. RAINGER. ROAD, RAILS, Glemore Council's Architects. MESSRS. RAINGER. ROAD, RAILS, Glemore than SATURDAY, 20th February, 1960, so, not later than SATURDAY, 20th Feb

J. L. JUDD, Clerk of the Council.

Council Offices. Castle Street, Thornbury, Bristol. 6th February, 1960.

CONTRACTS

COUNTY BOROUGH OF SOUTHPORT.

DERS are invited for the ERECTION of a R and CHANGING ROOM BLOCK at the GEORGE V SCHOOL, SCARISBRICK NEW

ROAD.

Bills of Quantities can be obtained from the Borough Architect and Town Planning Officer, 99:105 Lord Street, on payment of Two Guineas, which sum will be refunded on receipt of a bona-fide Tender.

which sum will be refunded on received.

Tender.

Drawings can be seen during the normal office hours. Tenders to be delivered to the undersigned not later than the 11th MARCH.

R. EDGAR PERRINS, Town Clerk.

Town Hall, Southport

BOROUGH OF WANSTEAD AND WOODFORD.

TENDERS are invited for the PROVISION and LAYING by MACHINE of approx. 9,200 sq. yd. of FINE COLD ASPHALT as SURFACING to existing CARRIAGEWAY of LAKE HOUSE ROAD, together with appurtenant works. Tender documents should be obtained from the BOROUGH ENGINEER AND SURVEYOR, Municipal Offices, High Road, E. 18, on payment of £2 deposit, which will be returned on receipt of a bona-fide Tender. Sealed Tenders to be delivered to him by Noon on 29th FEBRUARY, 1960.

ELLESMERE PORT. ROROUGH OF

CONTRACT NO. 289.

GARAGES AND SITE WORKS, SITE NO. 7 AND EXTENSION, MILL LANE/OVERPOOL ROAD, ELLESMERE PORT.

TENDERS are invited for the ERECTION of ZB LOCK-UP GARAGES and ancillary works, together with Site Works at the ABOVE Contract documents obtainable from the Borough Engineer and Surveyor. Queen Street, Ellesmere Port, on and after SATURDAY, 13th February, 1960. Sealed Tenders, in the plain official envelope provided, must reach the undersigned by not later than 5 p.m. on MONDAY, the 29th February, 1960. Could be applied to the sealed the sealed the lowest or any Tender.

R. J. BERNIE, Town Clerk

Municipal Offices, Ellesmere Port.
11th February, 1960.

BOROUGH OF ELLESMERE PORT.

CONTRACT NO. 288.

GARAGES AND SITE WORKS, SITE NO. 4—
ATHERTON ROAD, ELLESMERE PORT.

TENDERS are invited for the ERECTION of 25 LOCK-UP GARAGES and ancillary works, together with Site Works at the ABOVE.

Contract documents obtainable from the Borough Engineer and Survevor, Queen Street, Ellesmere Port, on and after SATURDAY, 13th February, 1960. Sealed Tenders, in the plain official envelope provided, must reach the undersigned by not later than 5 p.m. on MONDAY, the 29th February, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

R. J. BERNIE.

R. J. BERNIE, Town Clerk.

Municipal Offices, Ellesmere Port.
11th February, 1960.

BOROUGH OF REDCAR. STREET LIGHTING-REDCAR LANE.

TENDERS are invited for the REPCTION of STREET LIGHTING UNITS in Redcar. The units consist of ELLE.C.O. Columns and Lanterns.

The Form of Tender and Specification may be obtained from the Borough Engineer. Ridley House, Coatham Road, Redcar, at whose Office these documents and Drawings may be inspected during office hours. The envelopes supplied, bearing no Tenders, in the envelopes supplied, bearing no Tenders, in the envelopes and endorsed "Street Lighting Redcar Landers and Endors Lighting Redcar Landers and Property of the Landers and Landers and

HUGH CALDWELL. Town Clerk

Municipal Buildings, Redcar.

BOROUGH OF ROWLEY REGIS.

TEMBERS are invited for the REGRADING of 300 lin, vd. of MOUSESWEET BROOK, the CONSTRUCTION of approx. 190 lin, vd. of BRICK (CONCRETE OUTFALL and CULVERT in BROOK LANE, and 700 lin, vd. of 36in, to 36

Municipal Buildings, Old Hill, Staffs. 5th February, 1960.

ASHFORD (KENT) URBAN DISTRICT

FIXED TENDERS are invited for the ERECTION the FOLLOWING:—

or the FOLLOWING:

(a) Filter House—Beaver Road Swimming Bath, Ashford.

(b) Public Conveniences — Odeon Car Park, Ashford.

The work on site (a) comprises a Timber Filter Plant; site (b) comprises Ladies' and Excavations for filter plant; site (b) comprises Ladies' and Gents' Conveniences.

Drawings: Spicification and Form of Tender may be obtained from the Surveyor, 1 Elwick Road, Ashford. Kent, by 12th FEBRUARY, 1950.

Sealed Tenders, in the envelope provided, are to be delivered by not later than Noon on 24th FEBRUARY, 1950.

G. H. REDEEPM.

G. H. REDFERN. Clerk of the Council.

CONTRACTS

BOROUGH OF SLOUGH. HIGHWAYS CONSTRUCTION AND IMPROVEMENT.

TENDERS are invited for CARRYING OUT the FOLLOWING WORKS in 1960/61 on a Schedule of

POLICEWING WORKS IN 1960-61 on a Schedule of PRIFESONWAY and Carriageway Construction. Kerbing and Incidental works.
Surface Water Drainage and Sewerage Works.
Specification. Schedule of Prices. Form of Tender and details of the proposed works obtainable from Borough Engineer. Town Hall, Slough, Bucks., on Borough Engineer. Town Hall, Slough, Bucks., will be refunded on receipt of a bona-fide Tender and the return of the documents.
Tenders must be returned to the TOWN CLERK, Town Hall, Slough, Bucks., in the envelope provided, by Noon. 3rd MARCH, 1960.

BOROUGH OF RUGBY. MODERNISATION OF 100 COUNCIL HOUSES AT CROOP HILL ESTATE.

The CORPORATION invite TENDERS for the PROVISION of BATHROOMS. INSTALLATION of DOMESTIC HOT WATER SYSTEMS and incidental works at THESE HOUSES.

Specification, Drawing and Form of Tender may be obtained from the Borough Surveyor, Burford House, Rugby, on payment of a deposit of £2 2s., which will be refunded an receipt of a bona-fide Tender, Tenders, in the envelope provided, must be delivered to the undersigned at "The Lawn." Newbold Road, Rugby, not later than Noon on 1st MARCH, 1960. Rugby, not later than Noon on 1st MARCH, 1960. The Corporation do not undertake to accept the lowest or any Tender.

T. L. DUFFY, Town Glerk

BOROUGH OF DARTFORD. GROUP "B" STREET LIGHTING-OAKFIELD LANE.

GROUP "B" STREET LIGHTING—OAKFIELD LANE.

TENDERS are invited for SUPPLY and ERECTION of 30 complete LIGHTING UNITS, comprising 15ft. Tubular Steel Columns, 80-Watt Mercury Vapour Lamps and Lanterns.

application to the undersigned upon payment of application to the undersigned upon payment of a deposit of £2 2s., which will be refurred on receipt of a bona-fide Tender and the returned on receipt of a bona-fide Tender and the returned all documents supplied, other than one copy of the Bill of Quantities.

Tenders, in a plain sealed envelope, marked "Oakfield Lane Street Lighting," but not bearing any name or mark indicating the sender, must be received by me not later than 12 Noon on TUESDAY, 1st March, 1960.

not later them to recommend to later them. 60.
The Corporation does not bind itself to accept any

THOS. ARMSTRONG. Town Clerk.

Council Offices, Dartford.

CITY OF MANCHESTER.

TENDERS invited for ELECTRICAL INSTALLATION to "TEMPLEMEAD" HOME FOR AGED PERSONS at WOODHOUSE PARK.
Specification and Drawings from CITY ARCHITECT, P.O. Box 488, Town Hall. Tenders returnable by MARCH 14th.

CITY OF MANCHESTER.

TENDERS invited for PAINTING and DECORATING at various SCHOOLS. Specification from CITY ARCHITECT. P.O. Box 488, Town Hall. Tenders returnable by MARCH 4th.

LEATHERHEAD URBAN COUNCIL. DISTRICT

PRIVATE STREET WORKS ACT. 1892.

TENDERS are invited for MAKING-UP PRIVATE STREET, STAG LEYS, ASHTEAD. Tender documents may be obtained from and Drawings examined at the Engineer and Surveyor's Department, Red House, Bull Hill, Leatherhead Tenders, in envelopes provided, to be delivered to the undersigned by Noon, 91 MARCH, 1960. J. EDE, Clerk of the Council.

Council Offices. Leatherhead.

CHIGWELL URBAN DISTRICT COUNCIL. FAIRVIEW ROAD, CHIGWELL.

FAIRVIEW ROAD, CHIGWELL.

The Council invites TENDERS for WORKS comprising approx. 270 lin. yd. Surface Water Sewer. Carriageway Drainage. 680 lin. yd. Kerbing, 1,970 sq. yd. Carriageway. 730 sq. yd. Footways.

2.5. (returnable after submission of bona-fide Tender Law Carriageway. 730 sq. yd. Footways.

2.5. (returnable after submission of bona-fide Tender from Engineer and Surveyor (address below, where prawings and Contract Conditions may be inspected). Contract will provide for Fair Wages Clause and Bond. Tenders, in sealed envelope (provided), bearing no mark indicating sender, to be delivered to the CLERK OF THE COUNCIL. Council Offices. Old Station Road, Loughton, Essex, by 1st MARCH, 1960.

The Council does not bind itself to accept the lowest or any Tender.

HAMBLEDON RURAL DISTRICT

ALTERATIONS. REPAIRS AND GENERAL MAINTENANCE WORKS TO GARAGE BLOCK AT PUBLIC HEALTH DEPOT, ALFOLD ROAD, CRANLEIGH.

TENDERS are invited from building contractors for ALTERATIONS, REPAIRS and GENERAL MAIN-TENANCE WORKS to BLOCK OF GARAGES to house Nine Vehicles at the Public Health Depot, Alfold Road,

TENANCE WORKS to BLUNG.

TENANCE WORKS to BLUNG.

Nine Vehicles at the Public Health Depot. Alfold Road, Cranlelgh.

Plan, Specification and Form of Tender may be obtained from the Office of the Engineer and Surveyor on payment of a deposit of £2 2s., returnable upon receipt of a bona-fide Tender and the return of all documents. (Cheques should be made payable to the Hambledon Rural District Council. crossed Lloyds Bank Limited, and sent to the Treasurer, Council Offices, in the endorsed envelopes provided, are to be returned to the undersigned not later than 12 Noon on MONDAY, the 7th March, 1960.

The Council do not bind themselves to accept the lowest or any Tender.

Dated this 5th day of February, 1960.

ROBIN J. GARLAND.

Clerk of the Council.

COUNTY BOROUGH OF SOUTHEND-ON-

CONSTRUCTION OF FOOTBRIDGE.

Contractors interested in submitting a TEMDER for the CONSTRUCTION of PIER HILL FOOTBRIDGE and incidental works in connection therewith, should submit their names, together with a deposit of £2, before 16th FEBRUARY, 1960, to the Borough Engineer and Surveyor for inclusion on a list of contractors from whom TEMDERS will the invited. The deposit will be refunded on receive of a bona-fide reduced and for the return of all loaned documents of the state of the

ARCHIBALD GLEN. Town Clerk.

COUNTY BOROUGH

(a) 10 RUNGALOWS, 32 FLATLETS AND FOUR HOUSES ON SITE ADJOINING ALBERT THORNTREE RAINSFORD CRESCENT, THORNTREE GROUP 27—PALLISTER PARK. (c) 10 POLICE HOUSES—GROUP 20—EASTERSIDE.

TENDERS are invited for the ERECTION of the ABOVE DWELLINGS from Borough Engineer, Municipal Buildings, Middlesbrough, deposit Two Guineas each Tenders of the Control of t

TENDERS are invited for the ABOVE. The work comprises Construction of approx. 2,200 sq. vd. of Reinforced Concrete Carriageway, Kerbing, 380 lin. vd. of 9in. and 12in. dia. Sewers. and ancillary works. Particulars from City Surveyor, 18 Fisher Street. Closing date, THURSDAY, 25th February, 1960. H. D. A. ROBERTSON, Town Clerk

FARNHAM URBAN DISTRICT COUNCIL. VICTORIA ROAD CAR PARK (PHASE 2).

The Council invite TENDERS for the CONSTRUCTION of the ABOVE WORKS, the approx. quantities

TION of the ABOVE WORKS, the approx. quantities being:

(a) Demolition of existing Buildings.
(b) 3,000 cu. yd. Excavation.
(c) 5,000 du. yd. Excavation.
(d) 6,000 du. yd. Excavation.
(d) 6,000 du. yd. Burnings Macadam Surgeyor.
(e) Ancillary Drainage Works.
Form of Tender, Specification and Bills of Quantities may be obtained from GEOFFREY POOLE. A.M.I.C.E., Engineer and Surgeyor. Council Offices, South Street, on the receipt of a bonal-fide Tender and/or the return of all documents.
General Conditions of Contract and Drawings may be inspected at the Office of the Engineer and Surveyor during normal working hours.

General Conditions of Contract and Drawings may be inspected at the Office of the Engineer and Surveyor during normal working hours.

The Council do not be undersigned not later than 12 Moon, TUESDAY, 8th March, 1960.

The Council do not blind themselves to accept the lowest or any Tender.

H. W. UNDERDOWN.

H. W. UNDERDOWN.
Acting Clerk of the Council.

FAREHAM URBAN DISTRICT COUNCIL. WESTERN WARDS MAIN DRAINAGE.

WESTERN WARDS MAIN DRAINAGE.

The Council invite TENDERS for the CONSTRUCTION of approx. 10,300 lin. yd. of 6in. to 24in. dia. STONEWARE. CONCRETE and SPUN-IRON PIPE SEWERS, including a Tidal Outfall, together with the necessary Manholes, etc.; the CONSTRUCTION of a SCREENING AND DISINTEGRATOR STATION and a SCREENING AND DISINTEGRATOR STATION and a SCREENING AND DISINTEGRATOR STATION and a SCREENING AND DISINTEGRATOR BILLS OF CONTRUCTION OF A STATION CONTROL OF CONTROL

B. W. RANDS, Clerk to the Council.

PETERBOROUGH RURAL DISTRICT

STREET LIGHTING-TRUNK ROAD A.47: AILSWORTH, CASTOR AND EYE.

AILSWORTH, CASTOR AND EYE.

TENDERS are invited for the ERECTION and INSTALLATION of STEEL COLUMNS and ELECTRICAL EOUIPMENT for 93 GROUP "A" SODIUM STREET CHIEF TOWN OF THE STEEL CONSULTING FORM OF THE STEEL CONSULTING THE STEEL CONSULTING FORM OF THE STEEL CONSULTING THE STEEL

G. W. WRIGHT, Clerk of the Council.

51 Priestgate, Peterborough. 8th February, 1960.

CONTRACTS

COUNTY BOROUGH OF CROYDON.

ANNUAL TENDERS are invited for SUPPLYING MATERIALS and SURFACING CARRIAGEWAYS by an approved mechanical spreader machine for:

(1) Cold Asphalt, approx. 67.250yd. sup.
(ii) Rolled Asphalt, approx. 12,000yd. sup.
(iii) Granite/Gravel Asphalt Base Course, approx. 1,400yd. sup.
(iv) Bitumen Macadam Carpet, approx. 6,000yd.

Some of these carriageways are required to be burned off and planed before surfacing (approx. 48.000vd. sup.).
Particulars and Form of Tender from the Borough Engineer. Closing date for Tenders, 29th FEBRUARY,

E. TABERNER, Town Clerk

STAFFORDSHIRE POTTERIES WATER

SHOOTERSHILLS RESERVOIR-CONTRACT NO. 55.

The Board invite TENDERS from civil engineering contractors experienced in this class of work for the CONSTRUCTION of a WATERTIGHT REINFORCED CONCRETE RESERVOIR of 2.000,000 gallons capacity in four units of 500,000 gallons at SANDON ROAD, near LONGTON, STOKE-ON-TREINT.

The Form of Tender, Conditions at SANDON ROAD, near LONGTON, STOKE-ON-TREINT.

The Form of Tender, Conditions be obtained from the undersigned on deposit of a cheque for Five Guineas, which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn.

Plans of the proposed works may be inspected at the Engineer and Manager's Office.

Two separate Tenders are required:

(1) Tender on fixed-price basis without any variation being allowed in wages and materials.

(2) Tender on fixed-price basis without any variation being allowed in wages and Materials.

The two Forms alternative basis mentioned above, must be enclosed in the plain envelope provided, endorsed "Tender for Shootershills Reservoir," and addressed to the Chairman, Staffordshire Potteries Water Board. C/o Engineer and Manager's Office. Albion Street, Hanley, Stoke-on-Trent, and delivered in one separate sealed envelope, similarly addressed, within the same time, copies of the alternative basis mentioned above must be delivered in one separate sealed envelope, similarly addressed, within the same time. This scaled envelope voir," and bear the tenderer's name.

Tenders which do not comply with the above maders which do not comply with the above more considered.

Mil.C.E., M.I.Mech.E., M.I.W.E., Engineer and Manager and Clerk.

Hanley, Stoke-on-Trent.

Albion Street, Hanley, Stoke-on-Trent.

CARR'S QUIPS.—ESTIMATES. If to send out estimates you really must—then send them to someone you're able to trust.—R. J. CARR. Britain's Top Free-lance Estimator, 42 Combe Road, New Malden. Surrey. Tel.: Malden 8640.

WANTED to HIRE or SUB-CONTRACT.

6/12 large TIPPING LORRIES. Surrey district.

—SAM BOOTH, LTD., Perrymount Chambers, Havwards Heath, Sussex. Tel.: Haywards Heath 1126.

For Contracts received too late for classification see page 709

APPOINTMENTS VACANT

COUNTY BOROUGH OF BARNSLEY. WATER DEPARTMENT.

APPLICATIONS are invited from suitably qualified and experienced persons for the FOLLOWING POSITIONS on the establishment of the water depart-

POSITIONS on the establishment of the water department:—

(1) Maintenance Superintendent, Grade A.P.T. III.

(2) Assistant Maintenance Superintendent, Grade Miscellaneous VI.

(3) Assistant District Superintendent, Grade Miscellaneous VI.

For posts (1) and (2) applicants should have experience of large diameter main laying and the organisation and congraol of the work of a waterworks of a waterworks of the post (3) knowledge and experience of the running and maintenance of mechanical fiters and treatment works is essential.

Further information about the posts and the conditions of service and forms of application may be obtained from the undernamed, by whom applications must be received by MONDAY, the 15th February, 1960.

Waterworks Once, Town Hall, Barrsley, January, 1960.

BOROUGH OF ENFIELD.

BOROUGH ENGINEER AND SURVEYOR'S

APPOINTMENT OF ENGINEERING ASSISTANT. (Population approx. 109,300. Area 12,401 Acres.)

APPLICATIONS are invited for the ABOVE PERMANENT APPOINTMENT at a salary in accordance with Grade A.P.T. If if the National Scheme of Conditions of Service (£765-£880 per annum, with the addition of London Weichting of £10-£30 ser annum, according to age). Commencing salary will be fixed at a point within the scale commensurate with qualifications and experience.

Applicants should have completed their professional training under the scheme for the training of Municipal or Civil Engineering.

Municipal and Authorities of the Authorities of Aut

APPOINTMENTS VACANT

SOUTHERN RHODESIA GOVERNMENT. VACANCIES-MATERIALS OFFICERS: DIVISION OF ROADS AND ROAD TRAFFIC.

DIVISION OF ROADS AND ROAD TRAFFIC.

VACANCIES exist for MATERIALS OFFICERS in the Division of Roads and Road Traffic of the Southally of Roads and Road Traffic of the Southally of Roads and Road Traffic of the Southally of Roads and Road Traffic of the Roads and Road Traffic of Roads and Roads and Control laboratories under a southally seen and control of control laboratories and the southally seen and the recording and the recording and technical data.

Salary Scale: £410 x £31—£441 x £42—£609 x £52—£672 x £103—£822 x £53—595 x £52 10s.

\$52.103.—£1,437 erainum.

The commencing salary will be based upon educational qualifications and approved previous experience but will not exceed £1,050 per annum. Previous experience and the Roads Roads

GLOUCESTERSHIRE COUNTY COUNCIL COUNTY SURVEYOR'S DEPARTMENT.

ASSISTANT ENGINEERS, QUALIFYING CLASS.

APPLICATIONS are invited for the ABOVE APPOINTMENTS, involving work on improvement schemes on trunk and county roads, planning illason and in soils laboratory. Through grading (subject to statistatory service) of APT. I. II and Social. Comparishments of the APPLICATION of APP

GUY H. DAVIS, Clerk of the County Council.

Shire Hall, Gloucester. 26th January, 1960.

BOROUGH OF WILLESDEN.

APPLICATIONS are invited from suitably qualified and experienced persons for the FOLLOWING PERMANENT APPOINTMENTS:

(a) Senior Engineering Assistant within Scale "A" (£1,240 x £50—£1,390 p.a.).

(b) Engineering Assistant within A.P.T. Special Grade (£783 x £40—£1,070 p.a.).

(c) Engineering Assistant within Grade A.P.T. I (£705-£860 p.a.).

(£610-£765 p.a.)
For all posts except (a) above, London Weighting maximum £30 p.a. is payable in addition to the salaries shown.
For post (a) above, preference will be given to candidates having above average experience in structural ungenering or severage or highway working commodation.

The Council are unable to assist with nousing accommodation.
Forms of Application and Conditions of Appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6. Applications to he returned to the undersigned not later than MONDAY, 29th February, 1960.
When writing for Application Forms, candidates must state for which appointment they wish to apply. (Signed) R. S. FORSTER, Town Clerk.

BOROUGH OF WILLESDEN.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the PERMANENT APPOINTMENT of TECHNICAL ASSISTANT. Salary within A.P.I. II (£765-£880 p.a.) plus London Weighting, maximum £30 p.a. Applicants should have had wide experience in the supervision and administration of minor civil engineering works undertaken by Direct Labour and Contract. Output and the supervision of application obtainable from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.6, and must be returned to the undersigned not later than 10 a.m. on MONDAY, 29th February, 1960.

(Signed) R. S. FORSTER, Town Clerk BOROUGH OF WILLESDEN.

BOROUGH ENGINEER AND SURVEYOR'S

APPLICATIONS are invited for the PERMANENT APPOINTMENT of CLERK OF WORKS. Salary within A.P.T. III (£880-£1,055 p.a.) plus London Weighting maximum £30 ser annum.

So are annum.

So are annum.

So are annum.

Supervision during construction of civil engineering and building works of considerable magnitude. The Council are unable to assist with housing accommodation.

Details and form of Application obtainable from the Borough Engineer and Surveyor, Town Hall, Dyne Road, Kilburn, N.W.G, and must he returned to the undersigned not later than 10 a.m. on MONDAY, 29th February, 1960.

(Signed) R. S. FORSTER, Town Clerk

BOROUGH OF WILLESDEN BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPLICATIONS are invited for the TWO PER-MANENT APPOINTMENTS in the Building Surveyor's Section of the FOLLOWING: General Assistants within Grade A.P.T. II (£765-£880 p.a.) plus London Weighting maximum £30 per annum.

maximum £30 per annum.

Apolicants should have had experience of the general work of a Building Surveyor's Office and the administration of building Surveyor's Office and the Administration of building Surveyor's Office and the Town Planning Acts. For one post-was rence of dealing with the control of adverticement will be an advantage. The Council cannot assist with housing accommoda-

ine Council of the Co

SUPPLEMENT

STAFFORDSHIRE COUNTY COUNCIL. COUNTY ROADS AND BRIDGES DEPARTMENT.

HIGHWAYS TESTING LABORATORY.

APPLICATIONS are invited for the APPOINTMENT of SENIOR LABORATORY ASSISTANT, on the Special Grade up to a maximum of £1,070 per annum, for work in the County Council's Highways Laboratory at Gnosail, near Stafford. A modern house with a laboratory is equipped with the most modern apparatus for testing bituminous and concrete products, and for investigating problems of soil mechanics. Applicants should be suitably qualified and should have had laboratory experience on testing and experimental work for all classes of the suitable of the construction of roads and with the suitable of the construction of roads and with the suitable of the construction of roads and with the suitable of the suitabl

be given to candidates with experience in submechanics.

The pointment is subject to the provisions of the Local Government Superannuation Acts, 1937/53.

The pointment is subject to the provisions of the Local Government Superannuation Acts, 1937/53.

The pointment Superannuation Acts, 1937/53.

The pointment Superannuation Acts, 1937/53.

The Council will consider granting financial assistance towards any expense reasonably incurred in connection with the removal of the successful andidate's furniture and household goods

Applications must be made the County Surveyor, County Buildings, 1946, 2018,

January, 1960. BOROUGH OF RUGBY. APPLICATIONS are invited for the FOLLOWING APPOINTMENTS in the Borough Surveyor's Depart-

APPO:NTMENTS in the Borough Surveyor's Department:

(a) Engineering Assistant: Salary within A.P.T. Grade II (£765-£880 p.a.).

(b) Clerk of Works: Cathidase must be proposed in the supervision of civil engineering works under contracts of a capital nature. Salary within A.P.T. Grade I (£610-£765 p.a.).

Each appointment will be subject to satisfactory annuation Acts, and other contracts of a capital nature. Salary medical examination, the Local manuation Acts, and other contracts of the contract of the c

GRANGEMOUTH. BURGH OF

RESIDENT ENGINEER.

APPLICATIONS are invited for the APPOINTMENT of a RESIDENT ENGINEER in the Burgh Engineer's Department at a salary on the Professional Assarans Scale of £795, rising by annual increments £55 to £1,075, with placing according to age and experience.

to £1,075, with placing according to age and experience.

Applicants should be Corporate Members of the institution of Civil Engineers or the Institution of Members of the Construction of a major drainage scheme.

The appointment will be a temporary one for an initial contract period of 22 months, but with the possibility, subject to satisfactory service of commondations of the construction of a stistactory service of commondations of the construction of the con

Municipal Chambers,
Grangemouth.
2nd February, 1960.

C I T Y O F B R A D F O R D.

FACTORIES ACT, 1937-SECTION 34. INSPECTOR (POST 60), GRADE A.P.T. I (£610-£765).

APPLICATIONS are Invited from suitably qualified persons for the ABOVE SUPERANNUABLE POST.

Duties involve inspections for means of escape in case of fire, and the preparation of reports and plans.

Gottruction and district and suitable of the property o

HENRY PATTEN, Town Clerk.

Town Hall, Bradford, 1

HITCHIN URBAN DISTRICT COUNCIL. SURVEYOR'S DEPARTMENT.

Temporary ENGINEERING ASSISTANT REQUIRED for road improvement schemes for ome year, with possible extension. Salary £1,000/£1,200, according to qualifications and experience.

Applications, stating age, qualifications and experience, and mames of two referees, to the CLERK, Council Jifices, Brand Street, Hitchin, Herts., by 29th FEBRUARY.

FYLDE WATER BOARD.

SEN'OR ASSISTANT ENGINEER (Structural)
SEN'OR ASSISTANT ENGINEER (Structural)
SCUIRED. Salary Scale A.P.T. V (\$1.220-\$1.375).
Commencing salary \$1.220 per annum.
Applicants must be Associate Members of either
the Institution of Structural Engineers or the Institution of Civil Engineers, and must have had extensive
experience of reinforced and prestressed concrete
design and construction. Some knowledge of modern
methods and based has an extensive capital works programme in hand, amounting to over £21-gm., in the
next five years. Successful applicants will, therefore,
have amole opoortunities for am interesting career.
The Board supply an area of approx. 425 square miles
and a population of 450,000.
Further details of work in and may be obtained
from the undersigneedore 2nd MARCH, 1960.
The appointment will be subject to the provisions
of the Local Government Superannuation Acts and
Regulations thereunder, and successful applicants will
be required to pass a medical examination.
FRANK LAW, B.S.-C.Tech.), M.I.C.E.,
Engineer to the Board,
Street,
Setton Street,

APPOINTMENTS VACANT

RESIDENT ENGINEER.

RESIDENT ENGINEER.

APPLICATIONS are invited for APPOINTMENT as RESIDENT ENGINEER for the construction of new Swimming Baths, at a salary within the remaining the salary within the remaining the salary within the remaining terminal salary within the remaining terminal salary within the remaining the salary within the salary service, be for the duration of the Contract period, estimated at 18 months, and it is expected that the work will commence during April 1950, experience in reinforced concrete and water-retaining structure, together with a sound knowledge of general building work and architectural finishings.

Applications, on forms obtainable from the Borough Edward of himself of the address below, must be returned to himself or the address below, must the February, 1960.

Canvassing, directly or indirectly, will disqualify.

MAROLD O. ROBERTS.

Town Hall, Waterloo, Liverpool, 22, 26th January, 1960.

BOROUGH OF ENFIELD BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF DEPUTY CLEANSING SUPERINTENDENT.

APPLICATIONS are invited for the PERMANENT APPOINTMENT of DEPUTY CLEANSING SUPER. INTENDENT at a salary in accordance with Grade A.P.T. I of the National Scheme of Conditions of Service (£6610-£765) per annum pius a London Weight-Grade of the National Scheme of Conditions of age). The commencing salary will be in according with qualifications and experience. Preference will be given to applicants who hold the Testamur of the Institute of Public Cleansing and have considerable experience in supervising collection and considerable experience in supervising collection and considerable experience in supervising collection and Application Forms obtains, the property of the Considerable Surveyor, 7 Little Park Gardens, Enfield, Middx., to be returned to the FEBRUARY, 1960. Surveyor, 7 String of the Understanding of the February, 1960.

CYRIL E. C. R. PLATTEN.
Town Clerk.

Public Offices, Enfield, Middx

BOROUGH OF ENFIELD. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TRENCH INSPECTOR.

APPLICATIONS are invited for the ABOVE PERMANENT APPOINTMENT at a salary in accordance with the Misc. Grade III of the National Scheme of Conditions of Service (£525-£590 per annum plus a London Weighting allowance of £10-£30 per annum according to age). The commencing salary will be experience.

perience.
The duties will include inspection and supervision trench openings by contractors and public utility detakers, together with inspection of road surfaces,

of trench openings by undertakers, together with inspection of road switching to the preference will be given to applicants who are conversant with the requirements of the Public Utilities Street Works Act and have experience in the keeping of records, and liaison with statutory Application Forms, returnable by MONDAY, 29th February, 1960, to be obtained from MR. H. D. PEAKE, M.S.C.Egn.J., M.I.C.E., Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield, Middx. CYRIL E. C. R. PLATTEN.

Town Clerk.

Public Offices, Enfield, Middx.

URBAN DISTRICT OF FELTHAM. APPOINTMENT OF SENIOR ENGINEERING ASSISTANT.

APPLICATIONS are invited for this APPOINT-MENT on the permanent staff of the Engineer and Surveyor's Department. Salary within Grade A.P.T. III (E880-£1.065) plus London Weighting. Applicants must be suitably qualified.

Forms of Application, obtainable from the undersigned, must be returned, accompanied by copies of two testimonials, not later than 26th FEBRUARY. 1960.

1960.
Canvassing, directly or indirectly, will disqualify and applicants must disclose, in writing, whether to their knowledge they are related to any member of or the holder of any senior office under, the Council. M. W. COUPE, Clerk of the Council.

Council Offices, Feltham, Middx.

W E L W Y N GARDEN CITY AND HATFIELD DEVELOPMENT CORPORATIONS. APPOINTMENT OF STOREKEEPER.

APPLICATIONS are invited for the APPOINTMENT STOREKEEPER to the Corporation's Works

APPLICATIONS are invited for the APPOINT Works of STOREKEEPER to the Corporation's Works Department of the Store of the Corporation's Works of STOREKEEPER to the Corporation's Works of Personal Corporation of the Store of the

CIVIL ENGINEER REQUIRED by RICHARD COSTAIN, LTD., for work in Nigeria. Candidates, preferably aged 27-35, should be University Graduates, or equivalent, and must have at least five years' practical experience with contractors: this should include piling in water esturies from barges, erection of steelwork and welding. Tours of 18 months, and the contractors of the months of the contractors of the contract

APPOINTMENTS VACANT

BOROUGH OF CROSBY. COUNTY BOROUGH OF BIRKENHEAD. ROADS DEPARTMENT.

APPL'CATIONS are invited for the FOLLOWING APPO'NTMENTS in the Borough Engineer and Surveyor's Department:

APPO'NTMENTS in the Borough Engineer and Surveyor's Department:

(1) Engineen Assistant, Grade A.P.T. II (2) E765/E880 p.a.).

(2) Rond Foreman, Grade M.V. (£650/E715 Applicant) or (1) should be qualified in accordance with the recommendations of the National Joint Council, and experience on constructional sites, will be an advantage.

Applicants for (2) must have had experience in the construction and maintenance of roads and in the construction and maintenance of roads and in the Applicant form and International Construction Forms and Further and Construction Forms and Further and BOROUGH ENGINEER AND SURVEYOR, 3 Conway Street, Birkenhead. Closing date for applications: 19th FEBRUARY, 1960.

Relationship to members or senior officers of the Council must be disclosed.

TARMAC CIVIL ENGINEERING, LTD., have vacancies for experienced ESTIMATORS. These are permanent positions with good prospection advancement.—Applications, which will be dealt with in strict confidence, must give details experience, qualifications, salary required, and should be addressed to Managing Director, TARMAC CIVIL ENGINEERING, LTD., Ettingshall, Wolverhampton.

F. J. C. LILLEY (CONTRACTORS), LTD, and ECTION TO SUB-AGENT/ENGINEERS AND TO SUB-AGENT/

SITE CASHIER: Applications invited from experienced men who have been site cashiers for at least the past five years and bonded and worked for a reputable national contractor, for large jobs in the Midlands area. Top salary and expenses offered to the right man.—WILSON LOVATT AND SONS, LTD., Clarence Street, Wolverhampton.

EAGRE

AGENTS and SITE ENGINEERS REQUIRED for various contracts throughout the country. Experience in earthworks, roads, drainage and heavy foundations essential. Knowledge of tracklaying would be advantageous.—Apply, in writing, giving details of age, experience, together with present salary, to:

The Contracts Manager,
EAGRE CONSTRUCTION CO., LTD.,
East Common Lane, Scuntherpe, Lines

DESIGN ENGINEER WANTED for Victoria head office of civil engineering contractor Should be a qualined civil engineer with sale and design office experience, and interested in mechanical engineering. — Write to Box V.1887, "The Contract Journal," quoting Ref. ABC/8.

SUB-AGENTS and ENGINEERS RE-QUIRED for general civil engineering work in various parts of the country.—Write, stating age, and giving full details of experience and salary required, to Box V.1092, "The Contract Journal."

Box V.1092, "The Contract journal."

CIVIL ENGINEERING ASSISTANTS REQUIRED for site work on contracts. The work is varied and interesting, with opportunities for provacted and interesting, with opportunities for provacted and study of new methods. Applicants should not be the provided of the provided of the provided and provided

JUNIOR CIVIL ENGINEERS REQUIRED to work on sites, with excellent opportunities for training. Applicants should be graduates, or equivalent, and should be between the ages of 20 and 26.—Apply in writing, giving brief details of qualifications and experience (including vacation course work), also stating age, to the Chief Engineer, THE DEMOLITION AND CONSTRUCTION CO., LTD., 3 St. James's Square, S.W.1.

SQUARY SUPPLY SQUARY SQ

CIVIL ENGINEERING SUPERVISOR

REQUIRED for the construction of estate roads and sewers in the Leicester/Derby area. Able to level set out and control labour with proved success. Pension scheme in operation after qualifying period.—Write, giving full particulars and some indication of salary required, to

H. C. JANES, LTD., 183 High Town Road, Luton.

GENERAL FOREMEN REQUIRED by national contractors for speculative housing in the Reading and Southampton areas. Permanent, well-paid pensionable positions for experienced men. Full particulars to Box V.1195, "The Contract Journal."

JUNIOR ESTIMATOR REQUIRED for mastic asphalt department in London office.—
Apply, stating age, experience and salary required, to the Secretary, AMALGAMATED ASPHALTE COMPANIES, LTD., Asphalte House, Palace Street, S.W.I.

PANIES, LTD., Asphalte House, Palace Street, S.W.1.

ROBERT M. DOUGLAS (CONTRACTORS),
LTD., REQU'RE SECTION ENGINEERS, SETTINGOUT ENG'NEERS and SOILS ENGINEERS for work,
including motorways and general civil engineering, in
any part of the country.—Apply in writing, stating
age, experience, qualifications and salary required, to
395 George Road, Birmingham, 23.

APPOINTMENTS VACANT

GENERAL FOREMAN (Building): Applica-GENERAL TORDINAN (Bulloling): Applications invited from Senior General Foremen who
are at the top of their grade and have handled large
building contracts in recent years, using initiative in
site administration and practical application of all
modern techniques, for work in the Midlands area.
Carpenter and Joiner background preferred. A good
salary and expenses and other staff terms will be
available to the successful applicant. — WILSON
LOVATT AND SONS, LTD., Clarence Street.

Wolverhampton.

BOWMAKER (PLANT), LTD., the Caterpillar Dealers, REQUIRE a SALES REPRESENTATIVE for North Staffordshire and Shropshire. The applicant should be between 25 and 35 years of age, he should have had experience in the earthmoving industry, and have the ability to assimilate knowledge of the full range of Caterpillar earthmoving equipment and its application, for which training will be given. Salary—Applications will be treated in confidence, and should be sent to the Personnel Manager at Noose Lane, Willenhall.

QUANTITY SURVEYOR REQUIRED for building construction involving all trades. Hudders-field office. Write Box V.1081, "The Contract journal."

DARGE London firm of foundation contractors REQUIRE DEPUTY to QUANTITY SURVEYOR. Must be capable of measuring reinforced concrete work from drawings on site for interim and final accounts; also control costings of contracts. Good salary and prospects.—Write, stating ame and experience, to Box V.1104, "The Contract Journal."

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION

Applications are invited for APPOINTMENTS to the development staff and to the bridge department. Candidates should be young men with some experience in the design and detailing of steel-frame buildings, with knowledge of 8.5.153. 5-day week and luncheon vouchers. Addission contributor of steel bridges, with knowledge of 8.5.153. 5-day week and luncheon vouchers. Addission contributor of steels of the staff of the staf

The Technical Adviser.

BRITISH CONSTRUCTIONAL STEELWORK
ASSOCIATION,
Artillery House, Artillery Row, London, S.W.1.

CONTRACTS MANAGER / SUPERVISOR REQUIRED by well-known old-established company of building and civil engineering contractors in the South-West. Applicants, possessing previous experience, should be capable of organising and controlling a number of contractors in the contractors in the contractors of the contractors of the controlling and controlling methods and plant, preplanning and cost control. Preferred age 30 to 45. The salary will be commensurate with experience. The position is permanent and pensionable. Car provided. Reply in confidence, riving age, and details of previous experience. to Box V.1080. "The Contract Journal."

W. & C. FRENCH, LTD., Civil Engineering W. and Building Contractors. REQUIRE an ESTIMATOR, 25-35, with experience of preparing tenders on bills of quantities for various types of work. Based on depot offices at Colchester, Essex.—Apply in writing, stating age, experience and salary required, to Personnel Manager, 50 Epping New Road, Buckhurst Hill, Essex.

HIII, ESSEX.

T. H. CONTRACTORS, LTD., REQUIRE ENGINEERS, age 20-26, for roadworks and main defining contract for the series of the series of

Figh Road, Condon, W-4.

SITE ENGINEER REQUIRED for civil engineering contract in Essex. Experience in setting-out, measuring and final accounts. Salary according to experience and qualifications.—Write Box V.1128. "The Contract Journal."

MOBILE CRANE SALES ENGINEERS

REQUIRED by large organisation who are now going to increase representation in all areas of the United Kingdom. High basic salary plus commission, expenses and good stamper of the property o

WRITE BOX V.1121, "THE CONTRACT JOURNAL."

CIVIL ENGINEERING ESTIMATORS REQUIRED by SHEPHARD, HILL AND CO., LTD., to work from London office. Preference will be given to Engineers having practical knowledge, age between 50-40 years. Excellent prospects for experienced imemable to work on own initiative. Top salary and allowances will be paid to the successful applicants.—Write, giving full details, to Managing Director, SHEPHARD, HILL AND CO., LTD., 25/27 Central Chambers, W.S.

A SPHALT AND TARMACADAM WORKS SUPERVISOR REQUIRED in S.W. London area. Good salary for right man.—Write, with references and experience, to Box V.1158, "The Contract Journal."

AGENT REQUIRED for sewage works contract in Midlands, reinforced concrete work. Permanent position with prospects for suitable applicants. Attractive salary and bonus offered,—TARSLAG, LTD., Wolverhampton.

and bonus offered.—TARSLAG, LTD. Wolverhampton.

CONSTRUCTION and Supervisory Staff: A
few appointments will shortly be made which
offer outstanding opportunities of advancement for
men well experienced in building, structural or civil
engineering work. The vacancies are suitable only
or SUPERVISORS, AGENTS, GENERAL FOREMEN
or ENGINEERS with proved ability in the supervision of work from head office, or on site, but offer
appropriate responsibility and rewards. If you are
strictest confidence, plving exact details of qualifications, and recent positions, together with exact
responsibilities. Please also indicate those areas in
which you would be prepared to work, and the type
of position you prefer, the salary expected, to Mr. E.
Batty, 1 Queen Anne's Gate, London, S.W.1.

APPOINTMENTS VACANT

PLANT FITTERS and MATES REQUIRED for overhauls of heavy civil engineering plant as contractors' plant depot in Watford. Experience or Ruston and N.C.K. excavators preferred. Permanent job. Good conditions.—Apply: MARPLES. RIDGWAY AND PARTNERS, LTD., Metropolitan Station Approach

GENERAL FOREMAN REQUIRED for civil engineering contract in Essex. — Please write, stating experience, with copy references, and salary required, to Box V.1130, "The Contract Journal."

WORKING FOREMAN REQUIRED for medium-size civil engineering centracts in Southern Home Counties. Applicants insufative and drive, with 900d all-round experience. Salary £700-£800 p.a., plus subsistence.—Write, with unit details, to Box V.1164, "The Contract Journal."

JUNIOR ENGINEER, with site experience and capable draughtsman, REQUIRED by company specialising in formwork and temporary structures. Salary by arrangement.—Write brief details to: GUYREX EQUIPMENT, LTD., 25 Craven Street, London, W.C.2.

YOUNG MAN REQUIRED as ASSISTANT ESTIMATOR. Experience of builders' quantities and daking-off from drawings essential. — Apply: ACALOR (1948), LTD., Kelvin Way, Crawley, Sussex.

MICHIGAN (GREAT BRITAIN), LTD.

REQUIRE a first-class experienced SALES REPRE-SENTATIVE who has handled tractor shovels and rubber-tyred earthmoving equipment, to complete their sales team in the Central Midlands area. Good salary. Pension scheme.—Write, with full details, to

The Personnel Officer (Ref. Mich-Sales), P.O. BOX NO. 3, Yorktown Works, Camberley, Surrey.

SURFACE MAINTENANCE SERVICES, LTD., REQUIRE a QUANTITY SURVEYOR to work in the Bournmouth first Applications invited from men aged 25-30 with experience of the engineering works. The Job will entail the responsibility for site measurement and the preparation of interim and final accounts for medium-size road and sewer contracts.—Applications, in writing, giving full details of past experience, salary required, and two recent references, to Personnel Manager, 124 Old Christchurch Road, Bournemouth.

MANAGER REQUIRED by painting contractors for branch office at Exeter. Must be efficient administrator and have detailed knowledge of surveying for all classes of contract work. Accommodation available. Utilimate appointment as direction or suitable applicant.—Write, stating previous experience, salary recoiled, etc., and for appointment, to Box V.1023, "The Contract Journal."

SUB-AGENT/ENGINEER REQUIRED to organise and supervise production of heavy precast concrete bridge units at depot in North London. Specialist experience in this sphere of operations required, together with general contracting experience. Write to Box V.1094, "The Contract Journal," quoting Ref. DEF/2.

SENIOR QUANTITY SURVEYOR RE-CUIRED for head office appointment. Applicants must have extensive experience in civil engineering construction work. Salary commensurate with experi-ence. Bonus and superannuation scheme in operation. Applications should be addressed to Personnel Officer, TARMAC CIVIL ENGINEERING, LTD., Ettingshall, Wolverhampton.

SITE SECTION ENGINEER REQUIRED for large dry dock construction on North-East Coast.
Age 25-30. Preferably experience of marine works and civil engineering qualifications of marine works be a series of the contract of the contract Journal of the contract Journal of the contract Journal of quoting Ref. KLM/7.

CIVIL ENGINEERING STAFF

CIVIL ENGINEERING STAFF

SITE STAFF:
The following are REQUIRED for a variety of civil engineering contracts:

ESENIOR AGENTS—Reference PE8

Having a minimum of 10 years' experience with major contractors.

Essential service experience with major contractors.

Essential test involving piling, excavation, mass, and reinforced concrete.

Must have had up to five years' experience similar to the above on contracts of approx. Elam. In value, and the proposition of the above on contracts of approx. Elam. In value, the above on contracts of approx. Elam. In value, and the proposition of the approx on contracts of approx. Elam. In value, and the proposition of the approx o

SIMON-CARVES. LTD., Contract Labour Department, Cheadle Heath, Stockport, Cheshire.

QUANTITY SURVEYOR ESTIMATOR to deal with inquiries, interim certificates and final accounts, REQUIRED for building and civil engineering contractors. Pension and life assurance scheme. Applicant required to be car driver and aged under 40. —Apply by letter, stating experience and salary required, to T. HOLDOWAY AND SONS, LTD., Westbury, Wilts.

EXPERIENCED ASSISTANTS REQUIRED for surveyors department of expanding building and civil engineering contractors. Pension and life assurance scheme.—Apply by letter, stating assertance and salary, to T. HOLDOWAY AND SONS, LTD., Westbury, Wilts.

JUNIOR SITE ENGINEER REQUIRED in Birmingham area for setting-out and measurements for road and sewer contract. Interviews will take place in Birmingham.—Write, with full particulars of experience and salary required, to Box V.1129, "The Contract Journal."

APPOINTMENTS VACANT

YOUNG Graduate CIVIL ENGINEER RE-QUIRED by old-established firm dredging contrac-tors. Previous experience not essential. Employment on permanent basis, with full staff benefits, for right man.—Write Box V.1034, "The Contract Journal."

SENIOR ESTIMATOR REQUIRED for contractors' branch office. Considerable previous experience in civil engineering essential. Permanent progressive post to satisfactory applicant, and participation in superannuation scheme.—Submit complete details of previous employers with application to Box V.1088, "The Contract Journal."

HUSSEY, EGAN AND PICKMERE. LTD., hare vacancies for SUB-AGENTS and SETTING OUT ENGINEERS on civil engineering contracts in England and Wales. Previous experience essential. Apply to Head Office, 24 Calthorpe Road, Edgbaston. Birmingham. 15, siving details of previous experience and stating age and salary required.

and stating age and salary required.

ROBERT M. DOUGLAS (CONTRACTORS),
LID. Quantity Surveying Department.—QUANTITS SURVEYORS REQUIRED for work in Gt. Britain,
with at least three years' experience of final accounts
for civil engineering and building works of £100,000
and ability. Excellent prospects for men of initiative
and ability of the prospects for men of initiative
and ability of the prospects of the prospect of the prospect
experience, and salary, to 395 George Road, Erdington,
Birmingham, 23.

CAN YOU SELL PLANT?

CAN YOU SELL PLANT?

HANGERS PLANT DIVISION need a top-class SALESMAN to sell contractors' plant. Successful applicant must have the following qualifications: (1) Have proven sales record (preferably in confect of the provent sales record (preferably in confect of the provent sales and 35 years old.

(2) Euternity be earning at least £1,000 per annum, and not satisfied with present income. Remuneration will be by salary and commission on profit, which will enable a good man to earn at least £1,250 per annum, and an outstanding man much more. This vacancy is for a man that can really sell will be selled to the provided of the provi

Plant Manager,
HANGERS PLANT DIVISION,
2 Alcester Road, Bromsgrove.

WANTED, FOREMEN CARPENTERS for major civil engineering contracts in the south-west area of Devon and Cornwall. Only experienced men need apply. Top wages, subsistence and bonus payable to successful applicants.—Write Box V.1141, "The Contract Journal."

MANAGER REQUIRED by company engaged in soortsfield and landscaping contracts. Experienced administrator and organiser. Permanent position for keen man. — Write Box V.1136, "The Contract Journal."

SIR ALFRED McALPINE AND SON, LTD., urgently REQUIRE experienced CIVIL ENGINEERS for contracts in South Lancashire and Cheshire. Good prospects and staff pension scheme.—Apply in writing stating age, qualifications, experience, and salary required, to Sir Alfred McAlpine and Son, Ltd., Hooton, Wirral, Cheshire.

ROBERT M. DOUGLAS (CONTRACTORS), LTD., REQUIRE AGENTS, SUB-AGENTS, GENERAL FOREMEN, FOREMEN and GANGERS for work in 'general civil engineering and building works, in any part of the country.—Apply in writing, stating age, experience, qualifications, and salary required, to 395 George Road, Birmingham, 23.

SALES REPRESENTATIVE REQUIRED for East of Scotland contractors' plant manufacturers. See experience with light dumpers, concrete mixes, etc., and engineering background desirable. Must be prepared to travel in U.K. periodically.—Apply with full particulars, including age and salary required, in conndence, to the General Manager, Box V.1163, "The Contract Journal."

SENIOR SURVEYOR

For the head office of C. J. SIMS, LTD., building and civil engineering contractors. Age 28-35. Applicants must be experienced in all phases of building surveying, from site measuring to preparation of final accounts, including the building-up of rates.—Apply, in confidence, giving age, complete details of training, experience and salary required, to:

C. J. SIMS, LTD., 2 Victoria Street, S.W.1.

WANTED, GENERAL FOREMAN for major civil engineering contracts in the southwest area of Devon and Cornwall. Only experienced foremen need apply. Top wages, subsistence and bonus pavable to successful applicants.—Write Box V.1135, "The Contract journal."

ENGINEERING ESTIMATORS: CIVIL ENGINEERING ESTIMATORS:

REQUIRE experienced Estimators for preparing tenders for motorways and similar projects. Permanent post, stating agm, qualifications, experience, and salary required, to Box V.1133, "The Contract Journal."

QUALIFIED COST ACCOUNTANT REQUIRED by large firm of clvil engineering contractors, Experience, in Costing this type of word of the contract Journal of Contract Contract Journal of Contract Contract Journal of Contract Con

A FIRM of public works contractors special-ising in Post Office ductwork REQUIRE a first-class TRAINEE-AGENT possessing drive, initiative and ambition. Applicant must be young and willing to lodge in any part of the country as required.—State age, references, etc.. in first instance to Box V.1127, "The Contract Journal."

APPOINTMENTS VACANT

REQUIRED, ENGINEERS for planning and design offices. Applicants must have had experience in planning of civil engineering or building contracts, or design of reinforced concrete and temporary structures. Salary commensurate with experience: bonus and pension scheme in operation, Applications should be addressed to Personnel Officer, TARMAC CIVIL ENGINEERING, LTD., Ettingshall, Wolverhampton.

PRODUCTION ENGINEER: Civil or Mining PRODUCTION ENGINEER: Civil or Mining Engineer with extensive experience in the control of large-scale mechanical earthmoving operations, REQUIRED as ASSISTANT PRODUCTION ENGINEER by mining company in Sierra Leone. Commencing salary £2,000 per annum plus 5 per cent. bonus plus for married men, passage or separation allowance of £10 per month and £5 per month for each child. 15-month tours followed by liberal leave on full salary in Keturn passage paid. Free furnished quarter s. Return passage paid. Free furnished quarters and medical attention. Contributory pension scheme with retirement at age 55. Life assurance and dependants income schemes.—Write, giving full details experience of the passage paid for the following formation of the passage paid for the following formation of the passage paid for the following formation of the following following formation of the following following

CIVIL ENGINEERING

SENIOR PROJECT MANAGER for large motorway scheme REQUIRED by national contractors. Applicants must be engineers well experienced in the control of projects involving expenditure of several millions per annum and with bridge and road experience. The appointment offers excellent conditions and prospects.—All letters will be kept strictly confidential to the director in charge of the project, and should be addressed to:

"D," BOX CJ895. LPE. Romano House, 399/401 Strand, London, W.C.2.

EXPERIENCED SURVEYOR REQUIRED on interim valuation and final accounts for civil engineering contracts, to operate from head office. Permanent position with pension rights.—Write in confidence, giving age, details of experience, previous employers, and salary required, to General Manager, Burker Construction Co., LTD., Ruscombe Works. Twyford, Berks.

AGENT and SITE ENGINEER REQUIRED for road contracts, by expanding firm of contractors. Top salary and prospects for men with ambitions.—Apply GALLIFORD AND SONS, LTD., Wolvey, Hinckley, Leicester.

PAVIORS and KERBLAYERS REQUIRED.

—GALLIFORD AND SONS, LTD., Wolvey,
Hinckley, Leicester.

JUNIOR SURVEYOR REQUIRED by civil engineering and building contractors in Middlesex. Applicants must be capable of preparing site measurements for interim/final accounts and subcontractors. Good prospects for a young man with initiative.—Write, giving full details of experience, age, and salary required, to Box V.1196, "The Contract Journal."

contract Journal.

ENGINEERS, CIVIL and MECHANICAL (Temporary), REQUIRED by iron ore mining company for one tour of approx. 18 months' duty in British West Africa. Civil Engineer to supervise foundation and steelwork contracts. and Mechanical Engineer to supervise installation of plant and machinery, including electrics, in an ore concentrating plant. Engineers with previous experience contract the rate of £5 per month and children's allowance at the rate of £5 per month and children's allowance at the rate of £5 per month and children's allowance at the rate of £5 per month and of ree life assurance. Return passage paid. Initial kit allowance. Free furnished accommodation of experience is a contraction of the contraction of

SIR LINDSAY PARKINSON AND CO., LTD.

REQUIRE qualified CIVIL ENGINEERS in London head office to participate in the planning of a wide variety of interesting civil engineering projects. Responsibilities will include investigation and detailed development of construction methods, design of temporary works and the preparation of programmes. Applicants must have not cless than they exers planning office or site exercises than they exers planning office or site works. These appointments are permanent, carrying attractive salaries, and are pensionable after a prohationary period.—Write, with full particulars, to:

Civil Engineering Director, SIR LINDSAY PARKINSON AND CO., LTD., 6 Lambeth Road, London, S.E.1.

NATIONALLY known plant hire company, opening new offices and works in the Manchester area, RECUIFE the services of a fully experienced man to take charge of the hire department and work under area manager. Must be conversant with the full range of contractors' plant and machinery, hire rates, wages, records, etc. Preference would be given to men with local connections, but this would not preclude other applicants with the necessary experience. Proft-sharing and pension scheme in existence, of the contract of the contract

CASHIER REQUIRED by civil engineering contractors, for contract in Liverpool area. Experience essential.—Reply to Box V.1146, "The Contract Journal," quoting Ref. QR5/6.

OFFICE MANAGER REQUIRED for builders' office in Hammersmith. Experienced in loustry and able to keep costs and accounts.—Reply to Box V.1147, "The Contract Journal," quoting Ref. QRS/7.

W. & C. FRENCH, LTD., Civil Engineering Building Contractors, REQUIRE an ESTIMATOR, 25-35, with experience of preparing tenders on bills of duantities for various types of civil engineering work. Based on head office at Buckhursh Hill. Essex.—Adouly in writing, stating age, experience and salary required, to Personnel Manager, 50 Epping New Road, Buckhurst Hill. Essex.

BUILDING SURVEYORS REQUIRED by a national building and civil engineering contractor. These positions are permanent, proprietally asperanuated. — Write, giving full details, reparticularly areas preferred, to Box Mo. 1991.

APPOINTMENTS VACANT

CONTRACTS SUPERVISOR REQUIRED for several civil engineering contracts in Central Scotland. Applications only from civil engineers with the necessary drive and with previous site experience in an administrative position as senior engineer or agent. Good salary and conditions: car provided Apply, stating age and particulars of experience, and present position, to Box V.1175, "The Contract Journal."

CONSTRUCTION work in Turkey: Vacancies on single status exist for: (1) CONSTRUCTION CONSTRUCTION EQUIPMENT GENERAL FOREMAN, capable of controlling, allocating and maintaining a large fleet of American makes of constructional equipment, including heavy mobile cranes, tractors, compressors, welding sets, concrete plant, etc. Only applicants job situated on Mediterranean coast. Stering salary, accommodation and messing provided with local currency, living allowance and kit allowance. Duration of contract: 18 to 24 months. (2) MALE CONFIDENTIAL SECRETARY STEMOGRAPHENE WITH ADDITIONAL ASSISTANT to Manager, with knowledge Conditions as above. — Written applications only, stating age and full details, to Oil Construction Manager, FOSTER WHEELER, LTD., 3 lxworth Place, London, S.W.S.

MYTON LTD.

(A member of the Taylor Woodrow Group) REQUIRE first-class GENERAL FOREMAN for contract in the London area. Must be particularly well experienced in the substructure and reinforced concrete framapplicable to multi-storey buildings. Attractive position with prospects, and pension scheme.—Replies, tondence, with full particulars of experience, to:

Personnel Manager, MYTON, LTD., "Western House." Western Avenue, Ealing, London, W.S.

CIVIL ENGINEER (Junior) REQUIRED for temporary employment of approx. 15 months on pre-contract surveys for large projects in surveys and and building construction. Successful applicant will be considered for transfer to resident engineer's staff when established. Salary £1,500 per annum plus 5 per cent. bonus, for married man separation allowance of £10 per month and £5 per month for each child. Return passage the surveys of the surveys

House, Finsbury Square, London, E.C.2.

ENGINEER/AGENT REOURED for civil engineering contracts, mainly in the London area. Applicants should be under 40 years of age and must have had wide experience, particularly on roads and sewers. The successful applicant will be responsible for the control and supervision of all contracts on which he is engaged, and must possess drive and initiative, together with a cost-conscious attitude. The position is permanent and progressive, and contributory pension scheme is in operation. The position is permanent and progressive, and service of the properties of the progressive of t

Wealdstone, Middlesex.

GENERAL FOREMAN (Civil Engineering):
Applications invited from Senior General Foremen, top of their grade in reinforced concrete work of all classes, including factories and industrial work, for the Midlands area. Experienced in using initiative in site administration with minimum of supervision and practical application of all modern techniques.—The Country of the Coun

FENCING EXPERT REQUIRED, capable of working on own initiative and able negotiate at too level. Only gentlemen conversant with all aspects of wood fencing, etc., including costings, contracts and supervision of work, etc., are invited to apply. Good salary offered to right man. Present staff advised of vacancy.—Write Box V.9812, "The Contract Journal."

BUILDING SURVEYOR/ESTIMATOR

REQUIRED by W. H. ALLEN. SONS AND CO., LTD. The successful applicant will be responsible to the works engineer for the introduction and, later, operation and financial administration of a progressive building maintenance scheme. Age should be between 25-35 years and qualifications should include, for preference, A.R.I.C.S. The company has an excellent pension and life assurance scheme in operation, and Assistance will be given towards moving expenses. Applications, in writing, stating details of past experience and present salary, and quoting Ref. 1602/C1, should be forwarded to:

W. H. ALLEN, SONS AND CO., LTD.,

CIVIL ENGINEER—Barbados: RICHARD COSTA'N, LTD... have a vacancy for a CERTIFICATE ENGINEER on their Bridgetown Harbour contract. Barbados. Apolications are invited from men, preferably qualified Engineers, aged 30-35, with experience on major civil engineering contracts. including overall responsibility for measurement and the preparation of claims.—Please write to Senior Personnel Officer, 111 Westminster Bridge Road, London, S.E.1.

London, S.E.1.

CIVIL/STRUCTURAL DESIGN ENGINEER
REQUIRED to fil a post as Assistant Design
English Renament of the state of the state

Bridge Road, London, S.E.1.

NATIONAL contractors engaged in largescale civil engineering projects invite applications
from well-evperienced CIVIL ENGINEER'NG AGENTS,
SUS-AGENTS, CIVIL ENGINEER'NG AGENTS,
MEN anxious to make propress in their calling. The
appointments offer excellent conditions and surpermanent and pensionable for the right men. Applicants should give before the properties of the contract of the contract

APPOINTMENTS VACANT

ESTABLISHED company of building and civil engineering contractors REQUIRE an ASSISTANT ENGINEER for head office duties in connection with large-scale water and gas mainlaying contracts throughout the country. Applicants should contract throughout the country. Applicants should be recompared to the country of the contract should be recompared to the country of the

Road, Litherland, Liverpool, 21.

CIVIL ENGINEER ASSISTANT ESTIMATOR REQUIRED by Glasgow firm of civil engineering contractors. Applicants must have had a minimum of five years' site experience and be capable of working on own initiative. This is intended to be a permanent head office appointment, and a staff gension scheme is in operation.—Apply. stating age, previous experience, and qualifications, to A. A. Road, Glasdow, E.Z.

Road, Glasgow, E.2.

CIVIL ENGINEERING CONTRACTS

MANAGER and BUILDING MANAGER Appointments: National contractors invite applications from meen of experience and proven ability to take charge the contractors invite applications from the contractors of the contractors invite applications from the contractors of the c

SENIOR SITE AGENTS

Capable men accustomed to handling contracts in the region of £500,000 are REQUIRED by leading building contractors for their Manchester branch. Superannua-tion scheme in operation.—Apply, with full details, to:

BERNARD SUNLEY AND SONS, LTD., Portland Street, Manchester, 1,

CIVIL Engineering contractors have vacancies
In Scotland for SENIOR CIVIL ENGINEERS with
good site experience and ability to take charge of
works.—Applicants should give full details of qualifications and experience, and state salary expected,
to Box 379, Robertson and Scott. 42 Charlotte
Square, Edinburgh.

Senior Civil Engineering Scott, 42 Chariotte
SENIOR CIVIL ENGINEERING PROJECT
MANAGER: Applications are invited from qualified Civil Engineers of proven ability in control of large-scale civil engineering works, including works in which excavation is a prime component. The position offers excellent conditions and prospects. Please write, in confidence, to Box V.1192, "The Contract Journal."

HOLLAND & HANNEN AND CUBITTS (GREAT BRITAIN), LTD., REQUIRE the following staff: SEN'OR CIVIL ENGINEERING AGENT and GENERAL FOREMEN for civil engineering contracts. Applicants, who must have had good experience in civil engineering construction, are invited to send full details to Mr. E. E. Batty, 1 Queen Anne's Gate, London, S.W.1.

CIVIL ENGINEER

North-East England, preferably 30/35 years of age, not necessarily qualified but having a knowledge of civil engineering contractors in the Newcastle area. REQUIRED to take charge of an earthmoving contract department of a progressive and well-established company. Car provided. This is a permanent appointment with a contributory pension scheme.—Full details of experience, education and salary required, to:

BOX 1088. PETER A. MENZIES. Advertising. 2 Newton Place. Charing Cross. Glasgow, C.3.

FOREMAN FITTER REQUIRED by nationoffices and works in the Manchester area. Must be
conversant with the full range of medium-size conrecommendation of the manufacture of the second of the right man; fixed salary is a permanent
lob for the right man; fixed salary is a permanent
with participation in profit-sharing and pension
scheme or, if preferred, hourly rate.—Please write,
stating age and full details of previous experience, to
Box V.1189, "The Contract Journal."

ROBERT M. DOUGLAS (CONTRACTORS) LTD., REQUIRE DESIGNER-DETAILERS immediately for work on multi-storey concrete structures, Apply, giving age, full details of experience, and salary required, to 395 George Road, Birmingham, 23.

salary required, to 395 George Road, Birmingham, 23.

CONTRACTOR'S SURVEYOR REQUIRED
for an expanding firm of reinforced concrete
specialists. Applicants, preferably 25-35, must have
experience in interim and final valuations, with some
knowledge of taking-off and price build-up for all
trades. This is an excellent opening for a man with
drive and initiative to secure a progressive position
in a well-established firm with good connections.
to Chief Surveyor, The LONDON DERRO-CONCRETE
CO., LTD., Maxted Road, Hemel Hempstead, Herts.

RUDDOCK & MEIGHAN, LTD., have a vacancy for an ENGINEER AGENT. Candidates need accessarily an endineer of the second experience in general civil engineering works. Permanent position and good opportunity for advancement. Pension scheme in operation.—Apply, solving details of age, experience, and indication of salary, to Burford House, Harrow View, Wealdstone, Middlesex.

CONSULTING Engineers have vacancies for JUNIOR ASS'STANTS for water supply and sewerage work in the West of England. Salary will be according to age and experience.—Full details to Box V.1170, "The Contract Journal."

ENGINEER-AGENT REQUIRED for road and sewer construction in Essex. Good prospects for right man to take up position of directorship. Write Box V.1171, "The Contract Journal."

FOREMAN FITTER REQUIRED for civil engineering site. Bristol area. Previous experience in similar capacity essential.—Applications, in writing, to Plant Manager, JOHN HOWARD AND CO., LTD., Montagu Road, Datchet, Bucks.

APPOINTMENTS VACANT

APPOINTMENTS VACANT

CIVIL ENGINEERS, India: Applications are invited for vacancies on a heavy civil engineering prolect in India as follows: SEN'OR ENGINEER with considerable contracting experience as agent, or as sentor Engineer on large prolects, to take charge of the contract of th

MR LEMENTATION S.E.T. CO., LTD., 20 Albert Embankment, London, S.E.T. Contractor REQUIRES WORKING ASSISTANT this spring, with drive and initiative, for work connected with sportshelds, swimming pools, housing estates, etc.—Write, giving full particulars of experience and wages required, to Box V.1089. "The Contract Journal."

JUNIOR SURVEYOR

For the head office of C. J. SIMS, LTD., building and civil engineering contractors. Age 20-25. Applicants must be experienced in all phases of building surveying, from site measuring to preparation of final accounts. Apply, in confidence, giving age, complete details of training, experience and salary required, to:

C. J. SIMS, LTD., 2 Victoria Street, S.W.1.

THE Building Equipment Division of an oldestablished, ever-progressive company of suppliers and contractors to the building trade REQUIRE and MANAGER for their mechanical plant department. While a good knowledge of this type of equipment is required, the main task is to nationally expand the company's activities in this field and it is therefore equally essential for applicants not only to have been equally essential for applicants not only to have been their ability to organise and promote business by personnel training, advertising, etc. This is an exceptionally good opportunity for a man who is willing to work hard dedicating himself to the success of his task. Applicants must be of good appearance and pleasant disposition and possess the ability to get and pleasant disposition and possess the ability to get pension scheme and non-contributory family security scheme. In the first instance please give full but brief particulars of career to date, stating susst and present employers and earnings, to Box V-1179, "The Contract Journal."

INTERNATIONAL civil engineering concern is to appoint a CONTRACTS MANAGER for overland and able to negotiate on soot. Estimating the result of the contract of

CIVIL ENGINEERING ESTIMATOR:

Applications invited from experienced men qualified and having spent recent years estimating for civil engineering work, including reinforced concrete, with well known contracting firms. Applications of the property of the addressed to WILSON SCI Confedence and should be addressed to WILSON SCI COnfedence and should be addressed to WILSON SCI CONFEDENCE TO SONS, LTD., Clarence Street, Wolverhampton.

CIVIL ENGINEER.—Keen young Assistant Engineer REQUIRED for large shield driven low-pressure compressed air tunnel contract. — Apoly: MITCHELL BROS., SONS AND CO., LTD., 167 Victoria Street, London, S.W.1. Telephone: Victoria 4978.

JUNIOR CIVIL ENGINEERS REQUIRED by R'CHARD COSTAIN, LTD. There posts present excellent opportunities to obtain varied experience site and offer progressive careers with a rapidly expanding organisation. Age preferred 21-25.—Please write, outlining qualifications and experience to date, or PLESONNEL OFFICER, 111 Westminster Bridge Raak, London, S.E.1.

QUALIFIED ENGINEER (A.M.I.C.E.)

REQUIRED for head office and site duties. Design of R.C. structures, strutting, shuttering, etc.—Apply:

Managing Director, J. JARVIS AND SONS. LTD., 239 Vauxhall Bridge Road, S.W.1.

THOMAS LOWE & SONS, LTD., of Curzon Street, Burton-on-Trent, have a vacancy for a GENERAL FOREMAN capable of taking charge of building contracts in the Birmingham area up to a value of £200,000.—Applications should be submitted in writing, stating age, experience and salary required.

THOMAS LOWE & SONS, LTD., of CUTZON Street, Burton-on-Trent, have a vacancy in their Birmingham office for a PLANNING ENGINEER to organise preplanning, progressing and bonusing. Previous experience not essential but knowledge of site of the previous progressing and bonusing the previous progressing and bonusing the previous experience not essential but knowledge of site of the progressing the progressing the previous progressing and bonusing in this work.—Applications should be submitted in writing, stating age, experience, and salary required.

SUPERVISOR REQUIRED for erection of precast concrete flooring. Previous experience in this class of work preferred, design experience essential. Applicants must be capable of taking responsibility and progressing work from design stage to completion. Excellent opportunity for man with drive, initiative and ability. — Write Box V.1207, "The Contract Journal."

DESIGNER - DRAUGHTSMAN REQUIRED for office engaged in precast concrete and in-situ floors. Previous experience preferred but applicants with suitable experience will be considered provided they are adaptable and competent draughtsmen.—Write Box V.1208, "The Contract journal."

EXPERIENCED SURVEYOR REOUIRED by exoanding London contractors for contract supervision, interim valuations and agreement of final account. Some estimating experience is desirable. Permanent situation, pension scheme, etc. State age and salary required.—Write Box V.1182, "The Contract Journal."

SITE AGENTS and GENERAL FOREMEN.

If you can earn a high salary and are competent to access one of these appointments for housing and flat construction in the distance of the salary and s

APPOINTMENTS VACANT

CIVIL ENGINEER (Qualified), aged 30-40, REQUIRED by mining company in West Africa as Assistant to Civil Engineering Superintendent. Knowledge of Dermanent way maintenance in addition salary £1,700 per annum plus assential. Commencing salary £1,700 per annum plus assential to per month and £5 per month for each child 15-month tours followed by liberal leave on full salary in U.K. Return passage paid. Contributory pension full salary in U.K. Return passage paid. Contributory pension derails experience, stating age, married or single, to SIERRA LEONE DEVELOPMENT CO., LTD. Dept. A.C.E.3, City Gate House, Finsbury Square, E.C.2.

CONTRACTORS' Plant: Young INSIDE SALES ASSISTANT REQUIRED for London office, preferably with general knowledge of mechanical equipment. Good prospects, pension scheme after probationary period.—Applications, by letter or telephone, control of the property of the propert

PLANT HIRE AND TRANSPORT CLERK
WANTED immediately for large civil engineering
and building contractors. West London suburb.
Apoly in writing to Box V.1193, "The Contract
Journal."

SHELLABEAR PRICE, LTD., Auckland House, New Zealand Avenue, Waiton-on-Thames, Surrey, REOU'RE experienced SITE ENGINEERS for major roadworks in Lincoinshire and elsewhere.

PNGINEER OF DESIGNER-DRAUGHTS-MAN REQUIRED for small design office for reinforced concrete floors, etc. S.w. London.—Write in confidence, details age, education, training, experience, to Box V.1184. "The Contract Journal."

CHARGEHAND TARMAC RAKER REQUIRED.—Apply S. M. LEACH, LTD., Site Office,
Bovingdon, Herts. 2146.

CAPABLE MAN REQUIRED for plant hire department. Good prospects for the right man. Write. giving details. to METRO-LANT. LTD., ISG(177) C-richlewood Brandway, London, N.W.Z.

QUANTITY SURVEYOR (Senior and Assistant) REQUIRED by British civil engineering contractor for large public works contract in West Africa. — Write brief details of experience to 80x C.1.920 LPE, Romano House, 399–401 Strand, W.C.2.

For Advertisements received too late for classification see page 709

APPOINTMENTS WANTED

BUYER SEEKS POSITION. London area, 13 years' evoerlence, including buying of percusion and diamond drilling equipment, building materials, tools, etc. — Write Box W.1145, "The Contract lournal."

A GENT, wide experience civil engineering, nublic works, multi-storey and good-class buildings, SERY'S PROGRESSIVE POSITION as AREA or COVITRACTS MANAGER. Midlands preferred, but not essential.

Write Box W.1154, "The Contract Journal."

Note Box W.1154, "The Contract Journal."

CONTRACTS MANAGER SEEKS RESPONSIBLE APPOINTMENT with medium-sized company in S. England or West Country. Keen, energetic and resourceful, with a very wide range of experience in C.E., building and oublic works. Sound administrator for both site and office. Carobie of complete control and negotiations at too level. Gross remuneration \$2.000 and car sucoiled. Willing to arrow sollity for six months before attaining permanency in both salary and status. Genuine case from man with 10 dears, controlling a turnover upowards of \$300,000. Write Box W.1110, "The Contract lournal."

PLANT MANAGER SEEKS POSITION of trust and resoonsibility with building and civil engineering contractor. Living in London area.

TOREMAN I ACENT. roads, sewers, etc., use

FOREMAN/AGENT, roads, sewers, etc., use level. London or Greater preferred. Accustomed sole control. Write Box W.1161, "The Contract Journal."

WORK REQUIRED

MOTOR BOAT ON THE BTOYTHEY
CONSTRUCTIONAL WORK, ATTENDANCE,
PERSONNEL, GOODS, TOWAGE, etc. Craft and lebour
supoiled—Anoly: THOMAS BROS. #7 Sussex Road,
East Ham, London, E.G. Telephone: GRA. 6697/3151.

FOR HIRF or CONTRACT D74 (1959) D4,
D7 BULLDOYERS, 94% TRAXCAVATORS (1949),
TRYNCHERS, EYCSVATORS of all sizes, DUMPERS,
D100 Chiswick High ROAM, W.4. Tel.: CHI 8511/2.

ELECTRICAL INSTALLATIONS. domestic and industrial, UNDERTAKEN speedily and emclently in Hertitordshire and surrounding counties. Let us quote.—WARECRETE ELECTRICS, Ware. Telephone: Hertitord 4045.

Telephone: Heritord 4045.

EXCAVATION SUB-CONTRACTS
Technical staff available to analyse, programme and price complex projects. Particular attention given to finish and compaction. D9, D8, T018 and T014 Scrapers, Excavators, Loading Shovels and Lories available with competent and impairance specialism. Farm. Blacknest, Alton, Hants, Tel.: Bentley 2241.

SITE CLEARANCE. BUIK EXCAVATION IANES AND CO., LTD., Trading Estate, Slough. Telephone: Slough 20361—Ext. 4.

SAM BOOTH, ITD., Perrymount Chambers, Hawards Heath, Sussex. Tel.: Hawards Heath 1126 and 1758. SUB-CONTRACT or HIRE: D9s, with Buildozer and Caterpliar 463 Scrapers.

Buildozer and Caterpillar 463 Scrapers.

SITE CLEARANCE and BULK EARTHMOVING with latest machines. Playing Fields
Construction and all allied works.—For your contracts
in the Southern Counties, consult G. S. DANIELS, 387
Winchester Rd., Southampton. Southampton 68956.

GENERAL SITE CLEARANCE
With son-claised equipment. Awtward trees and
roots of the county of th

WORK REQUIRED

SPECIALISED EXPLOSIVES SERVICES.
U.K. and OVERSEAS MOBILE UNITS coverage on ex-service strong points, sea walls and dangerous structures, etc.—124 Old Shoreham Road, Southwick. Sussex. Tel.: Southwick 3791 or Shoreham 4193.

SUB-CONTRACT. — STEEL and FIXING. Competitive prices. First-class work. Used to fine limit specifications. Fully mobile. R. W. FOOKS, 69 Blunden Road, West Farm Estate, Cove, Farnborough, Hants.

BITUMINOUS and TARRED MACADAM
WORK WANTED within 50 miles Liverpool.
AND Co. Silve Mount, Birkenhead. Tei.: Birkenhead

SUB-CONTRACTS WANTED, Labour only, Foundations, concreting, drainage, gas and water mains, 2.2.. road pitching, etc.—J. FOLAN AND HARRIS, 2.6. Richmond Mount, Headingley, 7. Tel::

Leeds 58316.

FOR HIRE in Midlands, new Blaw Knox pF90 PAVING MACHINES, complete with experienced operators (and gang) if required. Sub-contract work or price per ton for material laid (Macadam, Asphalf, Wetmix, Leanmix Concrete, etc.).—For full details, apply: CAMMIDGE ROAD CONSTRUCTIONS, LTD., 48473. Henrietta Street, Coventry 88473.

CONCRETE BREAKING and CLEARANCE.
Highly competitive rates, firm prices. Sites
inspected without obligation. — "Phone: Mountview
2585: 7-10 a.m. or evenings.

UPROOTING—TREES, STUMPS,
HEDGES, etc. We have the most experience and
all modern equipment.—T. GRAVESON. LTD., Warton,
Carnforth, Lancs. Tel.: Carnforth 381 and 382 and

BULK EARTHMOVING. direct contract or sub-contract. Also BULLDOZERS and SCRAPERS for HIRE.—FRANK R. WALPOLE, LTD., 126 Wing Road, Leighton Buzzard, Beds. Leighton Buzzard 3351.

FOR, Leighton Buzzard, Beds. Leighton Buzzard 3351.

FOR HIRE OR SUB-CONTRACTS.

BTD6 3nd BTD6 BULLDOZERS and SCRAPERS,

BTD6 3nd TIMBER WINCH, C-terpillar TRAXCAVATOR, 1'a, cu. yd. Bucket. Competitive rates.

Excerienced operators. Go anywhere—COTSWOLD AULIGE.

Excerienced operators. Go anywhere—COTSWOLD Survey. Tel.: Farnham dodd day and night.

IF GRADING, SEEDING, TURFING and planting form part of your CONTRACT, we will be niessed to quote you.—HOLDRUP, 139 Bells Hill, Barnet. Telephone 911.

WANTED. HIRE or CONTRACT WORK
for modern fleet of DW21s, D8s and D8s.
Apply: BRODERICK AND RYAN, LTD., 421 Nottingham Road, likeston, Derby, Tel.: likeston 4381/2.

IF TREES, ROOTS or UNDERGROWTH
feature in your contract, we would be pleased to
quote for their ECONOMICAL DISPOSAL.

32 London Road, Camberley, Surrey. Telephone 14.

ALLEN OVECHO

ALLEN OXFORD GRADERS for HIRE.
GRASSPHALTE, LTD.,
Hampton Hill, Middlesex. Telephone: Molesey 4343.

BULK EXCAVATIONS, any quantity quoted for, own plant and lorries.

COFF AND SON (EXCAVATIONS), LTD.,
Buckhurst Hill, Cheapside, Ascot, Berks.

Ascot 1026/7/8.

WANTED FXCAVATION SITE CLEARANCE and DEMOLITION WORK.
R. BARKER (PECKHAM), LTD., New Cross 3337.

BUIK EXCAVATIONS and SITF WORKS undertaken. DIRECT or on SUB-CONTRACT basis. Quotations given for large or small contracts anywhere.—S. AND L. BULL BROS., LTD., 126A High Street, Winchester. Winchester 2264.

E R F C T I O N and DISMANTING
Structural Steelwork and all types of Prefabricated
Components. Speedy and efficient service.—ERECTORS,
30 milwell Cress. Cheshunt, Herts. Waltham Cross

BLASTING by EXPERTS on any project on the U.K.—Consult: CLARKE DEMOLITION AND CONSTRUCTION CO., LTD., Waldringheld 653.

BULK EARTHMOVING by DW21s. D9s or D8s.—STANTIAN PLANT. LTD., Emngham Street, Rotherham. Telephone: Rotherham. 78271-2.

AGENCIES

CIVIL engineering Contractors (specialists)
offer a remunerative REPRESENTATION to an
active FREE-LANCE REPRESENTATIVE with existing
connection with contractors, industrial concerns and
nationalised industries in each of the following centres:
London. Birminsham, Newcastle and Bristot. Knowledge of reinforced concrete desirable. Commissand
sais and retainer leading particulars to Box
X.1033, "The Contract Journal."
AGENT, based on Birmingham, existing
connection large industrial groups, architects and
corporations, offers manufacturers an ACCOMMODATION ADDRESS. Sales representation on commission
only basis if desired.
Write Box X.1183, "The Contract Journal."

DIVING

DIVERS IMMEDIATELY AVAILABLE.
Welding, cutting, construction, etc., any part of world.—UNDER WATER WELDERS AND REFAIRERS.
LTD., Cardiff. Tel. 29631. (After hrs.: Penarth 58131.) DIVING EQUIPMENT for SALE, surplus to requirements.—A. J. PARSLOE, 14 Halg Ave., Brighton, 6. Tel. 61228.

DIRECTORSHIP

ADVERTISER, with capital, wishes to meet experienced man with a view to forming a company. Preference will be given to the man having sound contacts with cable contractors and electrical authorities. DIRECTORSHIP with salary of \$2.000 per annum to commence, plus share of profits. This is a genuine offer for right type of man. All correspondence treated with attract continue. Write Box X.1183, "The Contract Journal."

ENGINEERING SURVEYS Ltd.

SUPPLEMENT

SURVEYS and SETTING-OUT

of

Civil-Engineering & Building work. U.K. or overseas

53a HIGH STREET, EWELL, SURREY

Phone: Burgh Heath 5342

PUBLICATIONS

CIVIL ENGINEERING BOOKS-IN-PRINT.
Catalogue fully describing 1,000 books available in Britain on Building, Architecture, Surveying, Soil Mechanics, Hydraulic and Sanitary Engineering, etc. Only 8d, by post from TECHNICAL BOOKS-IN-PRINT. 21 Lower Belgrave Street, London, S.W.1, or free from good booksellers.

PARTNERSHIPS

ENERGETIC WORKING PERSON with capital offered HALF INTEREST in civil engineering concern, Manchester area, £3,000. Write Box X.1152, "The Contract Journal."

BUSINESSES-SALE OR WANTED

BUILDING AND CIVIL ENGINEERING CONTRACTORS, privately owned, situated north side of Birmingham. Three years' contracts in ham amounting to £250,000 plus. Excellent staff. Principals only, please, £50,000.
Write Box X.1206, "The Contract Journal."

HORTICULTURAL

TOP SOIL.—200,000 cu. yd. available.
supplied ex site in approved cases.—LATHAM AND
CO. (CONTRACTORS), LTD., Westward House, Guildord Rd., Lightwater, Surrey, Bagshot 2037 and 2400.

KEEN quotation for your TURFING,
SEEDING and HEDGING CONTRACTS: London
and Home Counties.—R. J. ENSTONE & SON, LTD.,
Head Office: 34 Alma Rd., St. Albans. (St. Albans

TURFING SEEDING HEDGING.
Quotations for all branches of landscape work, anywhere in the U.K. C.E. contracts a speciality.
WEBSTER BROS., Horsforth, Leeds. Horsforth 2364.

WEBSTER BROS., Horsforth, Leeds. Horsforth 2384.

BUY the genuine CHILTERN TURF. Instructions for laying supplied free, Guaranteed salisfactory results. Turves 3ft. x 1ft., precision machine cut, weed treated, close mown, 5.3 per 100 delivered. Let us quote you for levelling and laying with guaranteed Clittern Turf or Grass Seed. Building estates laid-out for contractors. Orders taken week child and the contractors orders taken week child with the contractors orders taken week child with the contractors. Orders taken week child with the contractors orders taken week child with the contractors orders taken week child with the contractors. Orders taken week child with the contractors orders taken week child with the contractors or the contractors of the contractors or the contractors

TURVES.—Machine-cut 3ft. x lft., close-mown, weed-treated, 60'- per 100. Keen trade rates. We would be pleased to quote for your levelling and laying.—E. R. RANCE, LTD., 24 Sheepcot Lane. Watford. Telephone: Garston 2725.

MASSEY - FERGUSON 65 TRACTORS for HIRE, also comprehensive range of ATTACHMENTS, including Tipping Trailers, Loaders, Rotavators, and all Land Cultivation Implements, Turf-cutting Machines, etc. C.E. contractors catered for.—RING-WAY CONTRACTORS, LTD., Horsforth, near Leeds. Telephone: Horsforth 4805.

SED ING, TURFING, HEDGING, ROTARY CULTIVATION, etc. COWELL, Agricultural Contractors, Croston Rd., Farington, Leyland, Leyland, 81243/81849.

QUICKTHORN HEDGING PLANTS, strong, bushy, transplanted, 240/- per 1,000, 18in,-24in, high, less 10/- per 1,000 for 10,000 lots. Carriage paid for C.W.O.—BLAKEDOWN NURSERIES, LTD., Blakedown, Kidderminster.

SOILING, SEEDING and TURFING.
Site Clearance, Excavation and Levelling Work
undertaken in any part of the U.K. at competitive
prices.—GILLIAM, Purley, Surrey, UPLands 9222/6.
CHESHIRE TURF for SALE, ex existing
playing field, close mown. machine-cut, ready
to lay, some suitable for cricket squares, etc., 2/3 sq., vd., delivered 10 miles. Reduction for quanTel: Hawarden 2300.

YOUR THORNY PROBLEMS SOLVED.
We can offer OUICKTHORN at a very competitive
processing guide your.
ALFRED J. COX
(GARBENS), LTD., Stoke Poges, Slough.

QUICKS, extra quality, fibrous rooted:

12-18in., 16'-, 145'-; 18-24in., 24'-, 200'-;
24-30in., 28'-, 270'-; extra heavy; 30-40in., 35'-,
330'-; special transplanted and cut back; 18-24in.,
210'-, 2

LAND AND PROPERTY

SOUTHAMPTON. — On main road Portsmouth Single-Storey FACTORY A WARRIOTER SINGLE-STOREY FACTORY A WARRIOTER STOREY FACTORY A WARRIOTER SINGLE-STOREY FACTORY A SOLUTION OF THE STORE STORE

PROFESSIONAL SERVICES

CIVIL ENGINEERING SERVICES available on fee basis to contractors not desirous of maintaining permanent engineering staff. Setting out, surveys, preparation of monthly certificates, final accounts, claims, estimates, etc. Own transport. Write Box X.9962, "The Contract Journal," or 'phone ADDiscombe 3712.

CARR'S QUIPS.—ESTIMATES. To send tenders to me you consider not worth your trouble—would you think again if your turnover could be double?—R. J. CARR, Britain's Top Free-lance Estimator, 42 Coombe Road, New Malden, Surrey, Tel.; Malden 8640.

Tel.: Malden 8640.

CIVIL ENGINEERING CLAIMS.—Director Consultant Engineer, with long and varied experience in high-level negotiation of contractors' claims, OFFERS SERVICES on a fee-(commission basis. Write Box X.1058, "The Contract Journal."

ACCOMMODATION

CARAVANS to RENT for men with families.

Rent £7 to £17 per month, Delivery anywhere.

LANDSMAN'S SERVICES,
Buckden, Huntingdon. Telephone: Buckden 287.

Buckden, Huntingdon, Telephone: Buckden 287.

A CCOMMODATE your employees in a cosy 4-berth CARAVAN, fully equipped with heating, lighting, cooking and washing facilities. Hire rates from 50/- per week for four persons. Caravans delivered anywhere. NORTHERN CARAVAN DISTRIBUTORS, Handforth, Ches. Tel.: Mercury 4255/6.

SALES BY TENDER

BOROUGH OF WEMBLEY.

OFFERS are invited for the PURCHASE of SALVAGE and SCREENED DUST from the REFUSE DISPOSAL WORKS for the six months commencing 1st April, 1960.

No Tender Forms are to be issued, but particulars of the Salvage and Screened Dust produced, together with an estimate of the expected output during the period concerned, may be obtained from the Director of Public Cleansing. Alperton Lane, Wembley, on application, together with a stamped addressed envelope.

envelope.

Offers, in plain sealed envelopes endorsed "Offers for Salvage (Refuse Disposal)," and bearing no indication of the sender, must be received by the TOWN CLERK, Town Hall, Wembley, not later than the ST MARCH, 1960.

The Council do not bind themselves to accept the highest or any offer.

URBAN DISTRICT COUNCIL BRAINTREE AND BOCKING.

CODHAM MILL WATER SCHEME.

TENDERS FOR PUMPING MACHINERY.

TENDERS FOR PUMPING MACHINERY.

The Council are about to PURCHASE ELECTRIC PUMPING MACHINERY with STAND-BY OIL PLANT for the development of a new source of water supply. The machiner of a new source of water supply. The machiner of a new source of water supply. The machiner of a new source of water supply. The machiner of the machin

W. BALSON, Clerk of the Council.

Town Hall. Braintree, Essex.

SALE BY AUCTION

By Instructions from the Executors of H. B. Thomas deceased.

By Instructions from the Executors of H. B. Thomas deceased.

WENDENS AMBO. ESSEX.

(2 miles from Saffron Walden)
SALE by AUCTION of CONTRACTORS' EQUIPMENT

33ft. CRANE on revolving base: Winget Cement Mixer. self-propelling: Two Cement Mixers: Dumper; Portable Electric. Welder: Power Hacksaw, Large Drilling: Ford Solving Sales (Power Hacksaw). Large Drilling: Ford Solving Sales (Power Hacksaw). Large Drilling: Ford V8 Shooting Brake: Various Tools: Electrical Fittings: Large Doors: Parts of Twols: Electrical Fittings: Large Doors: Parts of

FULLER HORSEY

AUCTIONEERS AND VALUERS OF

> PLANT, MACHINERY AND **FACTORIES**

> > Since 1807

10 LLOYDS AVENUE LONDON E.C.3

TELEPHONE: ROYAL 4861

SALES BY AUCTION

and at Chandler's Ford, Hants.

FENGATE, PETERBOROUGH.
NORTHAMPTONSHIRE.

FOX AND VERGET TE

Will sell by AUCTION.
CIVIL ENGINEERING PLANT AND
EQUIPMENT, VEHICLES, WORKSHOP
MACHINERY AND SPARES
Including
Henderson 10-ton Twin Cableways: 15 Excavators

MACHINERY AND SPARES
Including
Inclu

By Order of Manchester Corporation Waterworks
Department and Edmund (Nuttall, Sons and Co
(London), Ltd.

EDWARD RUSHTON, SON AND KENYON
will SELL by AUCTION at the PLANT DEPOR,
LONGPOOL, KENDAL, on WEDNESDAY and THURSDAY, 2nd and 3rd MARCH, 1960, starting at
11 a.m. prompt each day,
CONTRACTORS' PLANT
including

DAY, 2nd and 3rd MARCH, 1960, starting at 11 a.m. promot each day.

CONTRACTORS' PLANT including — Inc

INVENTIONS

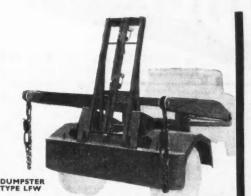
INDUSTRIAL ENGINEERS of repute invite. in strict confidence, DETAILS of INVENTIONS with object of manufacturing and world distribution. Write Box K.L.517, "The Contract Journal."

'CONTAINERISATION'

A NEW DEVELOPMENT IN MATERIALS HANDLING

The entire waste and by-products of a major industrial plant and many materials can be handled by one man—the driver/operator of a Dempster-Dumpster vehicle—and a series of containers strategically located throughout the plant. Containers are designed to suit every type of application in sizes up to 15 cu, yards capacity with weight lifts of from 6,000—50,000 lbs.

If you have a waste or materials handling problem why not ask for a survey to be made without obligation. 16 mm. sound films also available by arrangement.



TILT TYPES

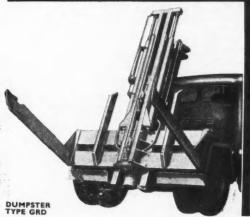


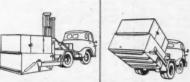


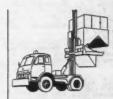


Illustrated above is the type LFW. The assembly with hydraulic operation is mounted on a standard chassis. This will handle tilt type and drop bottom containers. The illustrations below feature the type GRD which again handles both tilt type and drop bottom containers with a fork lift specifically designed for high dumping.

DROP BOTTOM TYPES







For large scale bulk collection and movement, the Dempster 'Dinosaur' is capable of picking up or setting down bodies of up to 40 cu. yards capacity. There are also the Dumpmaster self-loading vehicles with compaction of up to 3:1 and nominal compacted body capacities of between 18 and 30 cubic yards.

Manufactured under licence in U.K. by



POWELL DUFFRYN ENGINEERING CO. LTD.

Formerly Cambrian Wagon & Engineering Co. Ltd. CAMBRIAN WORKS, MAINDY, CARDIFF

Telephone: Cardiff 29611

Telegrams: PEEDENG, CARDIFF





BLAW KNOX LTD

The The 'SUPERSILO' bulk cement silo is the choice of leading contractors because no other unit, choice having all its features, is available at such low cost. 'SUPERSILOS' incorporate, as standard equipment, automatic aeration of cement, accurate pressure capsule weighing system, swinging weigher and dispenser, one piece unit with lifting eye and skids, 20 or 30 tons storage leading capacity, and all-steel construction. For cement economy ... it is best to use 'SUPERSILOS'

contractors. ipersilo

Box 146, 90/94 Brompton Road, London, S.W.3 Telephone: Kensington 5151 BK 562

INDEX TO ADVERTISERS

Page	
A.S.C.D. (Raynes Park), Ltd. 662 Abelson & Co. (Engineers), Ltd. 992 Ableson L. & D., Ltd. 768 A.C.E. Machinery, Ltd. 667 A.C.C. Ltd. (91), Isb Allam, E. P., & Co., Ltd. (91), Isb Allen, John, & Ford (Oxford), Ltd. 768 Allen, John, & Ford (Oxford), Ltd. 10, 748 Arup & Arup, Ltd. 11, 11, 11, 11, 11, 11, 11, 11, 11, 11	
Bamford, J. C. (Excavators), ttd. vi. III. IIIC Barford (Agricultural), ttd vi. Barras Rubber Co., ttd. 760 Benford, ttd. 760 Benford, ttd. 851 Bigwood Bros. (Birmingham), ttd. 651 Bigwood Bros. (Birmingham), ttd. Cover i an 600 Bisckwood Hodge Cover i an 600 Bisckwood Hodge Cover i an 600 Bisckwood to 600 Birmingham), ttd. 708, 743 Braithwalte & Co. (Structural), ttd. 773 Bray Construction Equipment, ttd. 773 Bray Construction Equipment, ttd. 649 Butters Bros. & Co., ttd. 753	
c	
Cartruk. Ltd. 652 C.A.V., Ltd. xiii C.A.V., Ltd. xiii Chadburns (Liverpool), Ltd. 774 Chaseside Engineering Co., Ltd. xiii Compton, J., Sons & Webb, Ltd. 864 Consolidated Pneumatic Tool Co., Ltd. 683, 684 Consolidated Pneumatic Tool Co., Ltd. 683, 684 Contractors' Services, Ltd. (County Commercial Cars (Sales), Ltd. 748 Cox, H., & Sons (Plant Hire), Ltd. 654 Clipps, R., & Co., Ltd. 18	
D	
Davies, O. L., Ltd. .584 Dawson, W. A., Ltd. .754 Dilloway, P. W., Ltd. Iva Diving Services, Ltd. .666 Doe, Ernest, & Sons, Ltd. .653 Dorman Long (Steel), Ltd. .766 Dunlop Rubber Co., Ltd. Cover vi	
E	
Eagre Construction Co., Ltd. xiva Eimco (Great Britain), Ltd. 770	
F	
Flexpipe, Ltd	
G	
Gazeway Plant Hire, Ltd. viib Glover Bros. (Mossley), Ltd. xib G.M. Power Plant Co., Ltd. 772	

G
Goodenough Engineering Group Hith Goodwin-Barsby & Co., Ltd. x 1 Green Bros. (Brandon) Ltd. 66 Green Bros. (Brandon) Ltd. 67 Grundly, James, & Co., Ltd. 688
н
Hardun & Sons, Ltd. Cover iv Hallam, Vic, Ltd
Industrial Pumps, Ltd. 758 International Harvester Co. of Great Britain, Ltd. viii, ix
ı
Johnson, C. H., (Machinery), Ltd. 660 Johnston, J. J., & Co., Ltd. 668 Jones, William, Ltd. 772 Joy-Sullivan, Ltd. vib
K
Kebric Plant, Ltd
L
Lacre, Ltd. 765 Lafarge Aluminous Cement Co., Ltd. 1xa Lead Wool Co., Ltd. 766 Leavesley, I. T., Ltd. 668 Leavesley, I. & Co., Ltd. xilia Lewerton, H. & Co., Ltd. 659 Liner Concrete Machinery Co., Ltd. 659 Liner Concrete Machinery Co., Ltd. 772 Liverpool Borax Co., Ltd. 772
M
Mackay Industrial Equipment, Ltd. 681 Mariety Concrete, Ltd. 746 Massey-Ferguson (G.B.), Ltd. Ilia, Ilia Maxim Conveyors (England), Ltd. 775 M.E. Englineering, Ltd. 662 Megator Pumps & Compressors, Ltd
N
National Coal Board 654 Neogene Products 652 N.C.K. Rapier Sales Co., Ltd. xa, xia Norwest Construction Co., Ltd. 766
0
Olding, Jack, & Co., LtdCover v. 687
P
Palmer, G. J., & Sons 666 Panel-Lastic Construction 668 Parker, Frederick, Ltd. 689

	Page
P	
Personnel Administration, Ltd. Pittrall, Ltd. Pittrall, Ltd. Pike, George, Ltd. Polyband, Ltd. Powell Duffren Engineering Co., Ltd. Priest, B., & Sons, Ltd.	774
R	
Rainbow Industries, Ltd. Ransomes & Rapier, Ltd. Raybestos-Belaco, Ltd. Raylor, H. B., & Co., Ltd. Richards, H. & Co., Ltd. Roadless Traction, Ltd. Road Machines (Drayton), Ltd. Ruston & Hornsby, Ltd.	776 xb 666 xb 777 755 710
s	
Saunders, H. A., Ltd. Saville (Tractors), Ltd. Scotney, Tom Mr., Ltd. Scotney, Tom Mr., Ltd. Simdine Simms, Sons & Cooke, Ltd. Simth, James, Bros. Simth, James, Bros. Standall Engineering, Ltd. Staveley Iron & Chemical Co., Ltd. Steels Engineering Products, Ltd. Steels Engineering (Cardiff), Ltd. Stothert & Pitt. Ltd. Sykes, Henry, Ltd. Sykes, Henry, Ltd.	690 .vii 662 668 .iib 756 778 vii 660 xiia viia 751 686 685 754
T	
Tarslag, Ltd. Taylor, F., & Sons (Manchester), Ltd. Taylor, F., & Sons (Manchester), Ltd. Thwaites Engineering Co., Ltd. Tilley Lamp Co., Ltd. Tilley Lamp Co., Ltd. Tubeclamps, Ltd. Tubewrights, Ltd.	780 680 655 .viii 780 754 770 680
U	
Universal Divers, Ltd. Under Water Welders & Repairers, Ltd. United Dominions Trust, Ltd.	686 770 588
V	
Val de Travers Asphalte Paving Co., Ltd	745 774
W	
Ward, Thos. W., Ltd. ivb, vb, Waywarden, Ltd. Wednesbury Tube Co., Ltd. Welding Industries, Ltd. Welding Industries, Ltd. Witter, R. & Sons (Engineers), Ltd. iii, Whitlock Bros. Ltd. iii, Wright, V. (Leeds), Ltd. iii,	663 662 769 779 666 668 754 776

Advertisements received too late for Classification

BOROUGH OF WANSTEAD AND

TRANSFER DEPOT — PROVISION OF PRECAST CONCRETE FRAME AND ROOF FOR GARAGE AND SALVAGE STORE.

TENDERS are invited for the SUPPLY and ERECTION of a PRECAST CONCRETE FRAME for a SUILDING of approx. 2.850 sq. tf., complete with Roofing and Rainwater Goods. These works may form part of a larger contract, the successful tenderer being nominated as a specialist sub-contractor to a main contractor. The successful tenderer being nominated as a specialist sub-contractor to a main contractor. The successful tenderer being nominated as a specialist sub-contractor to a main contractor. The successful tenderer was the successful tenderer and the successful tenderer was the successful tenderer and the successful tenderer was the successful tenderer was the successful tenderer was the successful tender.

which will be returned upon receipt of a bona-fide Tender. Sealed Tenders to be delivered to me by Noon on 26th FEBRUARY, 1960.

BOROUGH OF TWICKENHAM.

EXTERNAL PAINTING OF CORPORATION HOUSES.

EXTERNAL PAINTING OF CORPORATION HOUSES.

TENDERS are invited for the EXTERNAL PAINTING of HOUSES, FLATS and TEMPORARY
BUNGALOWS on SEVEN CORPORATION ESTATES,
General Conditions and Seecifications may be obtained
on payment of the properties of the properties of the payment of the properties of the

W. H. JONES, Town Clerk.

WHITSTABLE URBAN DISTRICT

STATION ROAD DEPOT

TENDERS are invited for the CONSTRUCTION in BRICKWORK and CORRUGATED ASBESTOS SHEET-ING of a NEW 90ft. X 27ft. HIGHWAYS DEPOT. The Structural Steelwork is to be Erected by MESSRS. DUNLOP AND RANKEN. Forms of Tender and Bills of Quantities may be obtained from, and plans will be available for inspection during normal office hours, at the office of the Engineer and Surveyor. The Castle Whistable.

—Station Road Depot, are to be delivered to the undersigned not later than First Post on MONDAY. 29th February. 1960.

The Castle.

The Castle. Whitstable. 8th February, 1960.

WHITSTABLE URBAN DISTRICT

PRIVATE STREET WORKS ACT, 1892, AND HIGHWAYS ACT, 1959.

MARINE CRESCENT—Length 2,200ft. approx. PRIEST WALK—Length 505ft. approx. PRINCESS ROAD (PART OF)—Length 749ft. approx. ST. SWITHINS ROAD (PART OF)—108ft. approx.

TENDERS are invited for the MAKING-UP and SUBFACE WATER SEWERING of the ABOVE ROADS. The works comprise the Construction of Concrete Carriageways. Footway Paving with Tarmacadam Verges, and the Construction of Surface Water Sewers. Specifications. Conditions, Forms of Tender and Billis inspected. Whitstate, of the Surface Water Pavings inspected. Whitstate, of the Surface Water Subscription of Surface Water Subscription. The Fenders are to be returned once hours. The Tenders are to be returned to the undersigned, in a plain sealed envelope endorsd as instructed on the Contract documents, and must be delivered by not later than 9 a.m. on MONDAY, 25th February, 1960. not later than y a.m. on him themselves to accept the lowest or any Tender.

F. TOMLINSON.

Clerk of the Council.

WIRRAL URBAN DISTRICT COUNCIL. PRIVATE STREET WORKS-FLORENCE AVENUE,

W. F. ROBERTS, Clerk of the Council.

CONTRACT PLANNING ENGINEER RE-ONTRACT PLANNING ENGINEER RE-QUIRED for a well-established and expanding company specialising in reinforced concrete structures. The post involves the planning of labour, plant and and present plant in the post plant and should have a thorough practical knowledge of in-situ and precast concrete work, and preferably some planning experience.—Applications, glving age, salary and experience, to Contracts Manager, THE LONDON FERRO-CONCRETE CO., LTD., Maxted Road, Hemel Nempstead, Herts.

WANTED, SITE CLERK for contracts in Devon and Cornwall. Permanent. Good remu-neration and subsistence paid to suitable applicant. Write Box V.1180, "The Contract Journal."

Write Box V.1180, "The Contract Journal."

ENGINEER: Housing Development division (centred in Surrey) of substantial construction company SEK services of an twelfer, e.g. 25.35, for work on the design of housing estate schemes, including site surveys and preparation of drawings. Good knowledge of sewerage and road design and good draughtsmanship essential. Pensionable, permanent position with good prospects. Assistance can age qualificativing accommedation.—Apoly, stating age qualificativing accommedation.—Apoly, stating agiving full details, to Box V.1.21," The Contract Journal."

BOROUGH OF CASTLEFORD. BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

BOROUGH OF LEYTON.

APPLICATIONS invited for APPOINTMENT of SEWER FOREMAN at a salary in accordance with Miscellaneous Grade III of £525 per annum, rising to £590 per annum, rising to £590 per annum, rising to £590 per annum tondon Weightling. Appointment subject to N.J.C. Conditions day week for Miscellaneous Classes of Officers. Five-Experience of sewer construction and maintenance Experience of sewer construction and maintenance essential. Apply, with full details, to Borough Englineer, Town Hall, Leyton, £10, not later than SATURDAY, 27th February, 1960.

Town Hall, Leyton, E.10

BOROUGH OF BARKING

MASON PAVIORS (T.U.) REQUIRED, hourly rate 4s. 1112d. per hour (£11 4s. 4d. per 44-hour week). Superannuation and sick benefit schemes.—Apply BOROUGH ENGINEER AND SURVEYOR, Town Hall. Barking, Essex.

Barking, Essex.

JAMAICA.—TECHNICAL SALES REPRESENTATIVE REQUIRED for leading distributors of earthmoving and allied equipment. Sound technical knowledge and wide practical experience essential. Between ages of 25 and 44. Excellent prospects and previous employment and types of equipment handled, to Box V.1200, "The Contract Journal."

A.M.I.C.E. REQUIRED, aged about 35, for virile and expanding firm. Must be first-class engineer and estimator with the drive, personality and administrative ability needed to produce results: capable of controlling throughout medium-sized road, sewer, bridge, etc., contracts from tendering, setting-out, life measurements to final certificate. Prospects academically qualified, would also be considered. Write, giving fullest particulars, and salary required, to FARMILOE AND MCVIE, LTD., 10 High Street. Weiwyn, Hertfordshire.

COST AND MEASURING SURVEYOR REQUIRED for building and civil engineering. Apply in confidence, giving details of education, training, age, and approx. salary required, to RILEY AND WHISHAW, LTD., Haslemere, Surrey.

PLANT FITTER REQUIRED for East good condon building contractors. Permanent position: good cate. Write Box V.1186, "The Contract lournal."

ASSISTANT CIVIL ENGINEERS REQUIRED for contracts in the north of England.
Applicants must be accurate with instruments and have initiative, drive, and have had site experience, write, stating age experience and salary required, to Elox V:1210, "The Contract Journal."

to Bux V.1210, "The Contract Journal."

JUNIOR SURVEYOR REQUIRED
by expanding London building contractors, for site
measuring, working up and generally assisting senior
surveyor on contract work. State age and salary
required.—Write Box V.1181, "The Contract Journal."

TARSLAG, LTD., have vacancies for experienced SITE ENGINEERS who wish to undertake
more responsible positions as SUB-AGENTS and
SENIOR ENGINEERS on various interesting contracts
centralised in North Midlands. Age 25 to 30, with
a minimum of five years' contracting experience.
Apply to Upper Wortley Road, Rotherham.

SURFACING CONTRACTORS REQUIRE
an ASSISTANT to MANAGER in London area.
Must have knowledge of estimating, supervision of
tarmacadam and asphalt contracts and prepare final
accounts. — Write, stating previous experience and
salary required, Box V.1178, "The Contract journal."

ASSISTANT to DIRECTOR REQUIRED, 25/35. Experience of earthmoving contracts and Caterolliar plant essential. Progressive job. Carprovided.—Apply: MOBILE HAULAGE CO., LTD., 230 Tottenham Court Road, London, W.1. Tel.:

FOREMAN REQUIRED immediately find south-western area. Experienced in general rowork, drainage, etc. Permanent position.
Reply Box V.1212. "The Contract Journal."

ALDERTON CONSTRUCTION COMPANY REQUIRES MEASURING QUANTITY SURYEYOR experienced in costing, to deal with group contracts. Excellent prospects for right man.—Tel. TRAfalgar 1494.

THE LONDON FERRO-CONCRETE CO. THE LONDUN FERRU-CUNCAREE Co., LTD., invite applications from ambitious young ENGINEERS to take charge of contracts up to \$100,000. This is a first-class opportunity for men with experience in reinforced concrete construction to obtain rapid permotion within an expanding company.—Applications, stating lags, experience and the concrete BOROUGH OF LEYTON. APPOINTMENT OF CLERK OF WORKS-

APPLICATIONS are invited for the ABOVE APPOINTMENT in the Borough Engineer's Department. Salary £18-£20 per week, to be fixed within this range in accordance with experience and qualifications. The appointment is for a period of two years, subject to satisfactory service, with the possibility of turther service thereafter, to a medical examination, and to the National Scheme of Conditions of Service, and the turth of the Conditions of Service, and the successful applicant will be required to commence his duties in June, 1960. Applications, giving age, training and full details of previous experience, and the names and addresses of two persons to whom reference may be made, to the conditions of the conditi

D. J. OSBORNE, Town Clerk.

Town Hall, Levton, E.10.

CHIGWELL URBAN DISTRICT COUNCIL.

CLERK OF WORKS (ROADS AND SEWERS).

CLERK OF WORKS (ROADS AND SEWERS).

APPLICATIONS invited for the ABOVE APPOINTMENT for supervision of construction of road and
sewer works by contractors for Council and in private
estate developments. Salary at rate of £795 per
annum, rising by annual increments to £910.

The statisfactory probationary period, expected to continue
indefinitely. Subject to medical examination. Taken
into Superannuation Scheme. One month's notice on
either side.

Must be experienced in supervising and controlling
contractors, setting-out, use of level, working from
drawlings, specifications and quantities, interim and
final measurements.

Apply, giving sign experience, present and previous
Apply, giving sign experience, present and previous
menes and addresses of two
referees, to ENGINEER AND SURVEYOR, Council
Offices, Loughton, Essex, not later than TUESDAY,
1st March, 1960.

1st March, 1960.

CIVIL ENGINEER: An opportunity is available for an ENGINEER; aged 25-30, to Join Company in the Richard Costain group. Candidates must pessuss a degree in engineering and preferably have completed a post-graduate course in soil mechanics. The person appointed will be based on London but must be prepared to travel in the U.K. or overseas to control site investigations.—Applications—Applications—Bridge Road, London, S.E.; 111 Westminster Bridge Road, London, S.E.;

CIVIL ENGINEER for road works, based on Glasgow, REQUIRED by old-established company. Capable of setting out works and taking control of medium-sized contracts. The position is permanent and pensionable, with good prospects of advancement for a man with drive and initiative. Our staff notified.—Write in confidence, glving details of age, experience and salary required, to Box V.1203. "The Contract Journal."

GENERAL FOREMAN REQUIRED for private estate development in Shrewsbury. About 100 houses annually. All trades, including road-making and sewering.—Apply FLETCHER ESTATES (HARLESCOTT), LTD., Whitchurch Road, Shrewsbury. Tel. 4436.

Tel. 4436.

DEPUTY MANAGER REQUIRED by large company manufacturing cast-stone and precast concrete products. Applicants must be thoroughly conversant with all methods of manufacture. Must be able to read details and control men. Good salary offered. Excellent prospects for a man about 35/40 years of age.—Write in first instance, giving details of experience, and salary required, to the Chairman, THE BLOKCRETE CO., LTD., Mount Pleasant Wharf, Southampton.

SMALL, expanding civil engineering com-pany REQUIRES young, ambitious ENGINEER for London contracts.—Tel.: CHAFEN AND NEWMAN, TRAfalgar 1494.

TRAfalgar 1494.

W AND C. FRENCH, LTD., urgently
REQUIRE fully experienced BONUS SURVEYORS
for civil engineering and building contracts.—Apply
in writing, stating age, experience, and salary required,
to Personnel Manager, 50 Epping New Road,
Buckhurst Hill, Essex.

Bucknurst Min, Essex.

ROOFING contractors, old-established in the Midlands, REQUIRE GENERAL FOREMAN.

Excellent opportunity for first-class man with sound, practical knowledge of slating and tiling.—Reply, stating age, qualifications, and salary required, to Box V.1174, "The Contract Journal."

WORKING FOREMAN CARPENTER REEXPERIENCE In CASE

EXPERIENCE IN THE CONTRACT, London area.

Experience in casing reinforced concrete structure and
accuracy with measurements essential. Excellent conditions and bonus to suitable man.—Write Box V.1172.

"The Contract Journal."

COMPETENT GENERAL FOREMAN with drive and initiative REQUIRED for flats contract in North London. Good salary and bonus to first-class man.—Write, stating age and experience, to Box V.1173, "The Contract Journal."

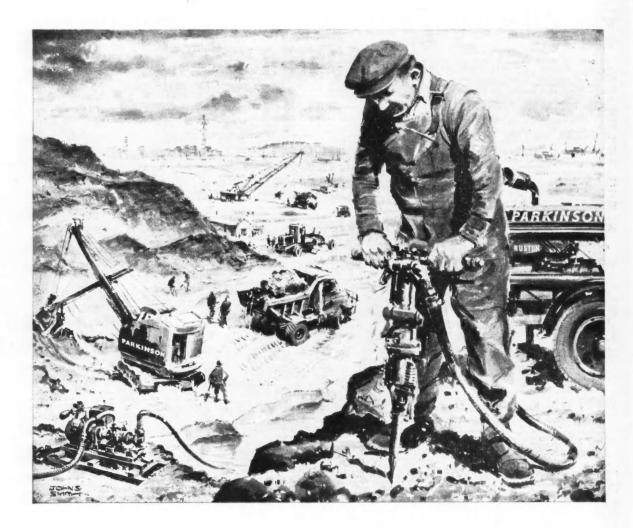
AGENT and SUB-AGENT REQUIRED. Wide experience roads, toward religiously

AGENT and SUB-AGENT REQUIRED:
Wide experience roads, sewers, reinforced concrete, bulk excavation. Knowledge of sea defence works an asset. Permanent positions to satisfactory applicants. East Kent area. — Write in confidence, stating ame, full details of experience, and salary expected, to Box V.1190, "The Contract Journal."

expected, to Box V.190, "The Contract Journal."

CIVIL ENGINEERING ESTIMATOR REQUIRED for contractors' London office. Applicants
must have had at least five years' experience at
agent or Senior Site Engineer and be capable of
competitive tendering for all types of civil engals of
contracts. It is greatly the contracts and the capable of
contracts. It is a contract to the contracts of the contracts of the contracts of the contracts of the contract of the co

ENGINEER-AGENT REQUIRED for large contract in Midlands. Applicants must be thoroughly experienced in reinforced concrete and disease excavation. This post offers excellent prospects in an expanding organisation.—Applicants should apply in writing, giving full details of sast experience. 36, qualifications, etc., to: MANAGING DIRECTOR, 11 Booth Street, Birminsham, 21.



'Sir Lindsay Parkinson' standardise on Ruston diesels

Ruston air-cooled diesels are now being specified regularly by Sir Lindsay Parkinson & Co. Ltd., for diesel-powered plant . . . and it's the same with other contractors throughout and beyond the U.K. . . . they know that there's nothing like a RUSTON for getting the best service from any contractor's plant. Already these engines are being used as standard equipment by manufacturers of compressors, cranes, excavators, concrete mixers, road rollers, welding sets, winches, pumping sets etc. It will pay you to insist on RUSTON-powered plant.



Nair-cooled diesels 4-466 b.h.p.

Today's most advanced power units for all contractors' plant . . . and backed by a first-class after-sales service!

THE

CONTRACT JOURNAL

INCORPORATING

THE BRITISH CONSTRUCTIONAL ENGINEER AND THE CONTRACTOR

THE CONTRACT JOURNAL

Incorporating

THE BRITISH CONSTRUCTIONAL ENGINEER
and
THE CONTRACTOR

Established 1879

No. 4,207 Vol. CLXXVI Feb. 11, 1960

Editor:

LAWRENCE McCARTHY

DDINCIPAL CONTENTS

PRINCIPAL CONTENTS	AGE
Hinkley Point Nuclear Power Station:	AUL
Civil Works substantially Complete	712
on £60m. Project. Economic Planners Under Fire: N.F.T.B.E. Annual General Meeting.	714
Recent Development in the Design of Highway Bridges	715
John Sumner's Notebook	717
Suy's Doctifier a contract of	718
Formidable Task Faces Highway Engineers	718
Canadians' Impression of British Con- crete Construction Techniques	719
Shell Centre Site Dispute: Investiga- tion Committee's Report	720
Late Construction News	720
18-storey Students' Block at Finsbury: L.C.C. Approve £1m. Project	721
National Contractors' Group: J.C.C. Looks at Their Activities	721
In Parliament: Mr. Marples Questioned About his Visits to the Continent and U.S.	722
June Start on Stafford By-pass: Ten- ders to be invited Next Month	723
Holloways to Build Multi-storey Edinburgh Office Block	723
"Vintage Year for Fires"	724
Building Research Station Digest	725
Men and Movements	726
Scottish Conference on Building Education	727
Talking of Safety, by "Dragee"	728
Trade Section	729
CURRENT CONSTRUCTIONAL ACTIVITIES:	
Projects	731
Contracts	
Contracts	123

Publishers

Awards 740

The Contract Journal Co., Ltd., 32 Southwark Bridge Road, London, S.E.1. Telephone: Waterloo 3411 (7 lines). Telegrams: "Seejasir," Sedist, London.

Subscriptions

"The Contract Journal" can be supplied direct from the above offices. Subscriptions, payable in advance: Yearly, £5 4s. (post free); half-yearly, £2 12s. An order form appears on page 784.

Advertisements

Advertisement rates may be obtained on application to R. Binfield, Advertisement Manager.

PRICE STABILITY

THE Federation of British Industries have answered the Chancellor of the Exchequer's recent appeal for stable prices with a salutory piece of economic realism. In an open letter, their President emphasises the important part which will be played in determining price policy by outside factors such as competition, the extent to which a firm can control its own costs, wage pressure and the need to retain earnings. Price stability, the F.B.I. state, is a matter not only for private manufacturing industry and trade unions, but also for other bodies such as nationalised industries, distributors and the Government itself; all sections of industry and commerce are involved.

Contractors will not disagree with this reasoning. Something like 90 per cent. of a building contract is basically beyond the direct control of an individual contractor; materials costs account for about 55 per cent. and labour costs for about 35 per cent.

More recently, a further complication has been introduced—firm prices. The official figures show that there was a welcome reduction in building costs of some 2 per cent. in 1959 compared with 1958 and the Government, no doubt, are congratulating themselves on this as being largely due to their insistence on firm prices. This may be so, but recent developments suggest that firm-price tendering can also react to the disadvantage of the building owner. Inevitably, contractors seek to be sure of their ground before submitting prices; no contractor wittingly submits a firm-price for a largish contract if there is the prospect of wage increases and shorter hours. The tendency must, therefore, be for him to urge on any person or body concerned with negotiating wage rates and working hours to come to agreement quickly, even if this results in an earlier increase in costs. After all, to be forewarned is to be forearmed, particularly where contracts worth many hundreds of thousands of pounds are involved. Something like this must almost certainly have been in the minds of those who negotiated the recent civil engineering agreement. If so, it is a development that must have been quite unforeseen by the Ministry.

The F.B.I. statement has put the question in proper perspective. The Chancellor had, perhaps, tended to over-simplify the prices problem and the F.B.I. were right to point out the complications inevitably involved. The contracting industry benefits from stability of prices in the same way as any other industry. It is, of course, anxious to reduce its own prices. But if this does not happen it would be quite wrong to suggest that it is failing in its duty. The Government must be sure that their own policies and activities help rather than hinder moves towards more stable and even lower prices.

Returning to Normal?

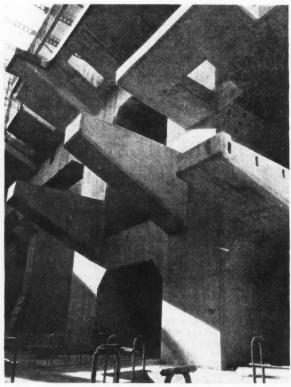
AT last there are real signs of an improvement in Anglo-Egyptian relations. During the past week it has been announced that B.O.A.C., after a lapse of $3\frac{1}{2}$ years, will resume service through Egypt. Of particular interest, however, is the Egyptian Government's invitation for a small party of British businessmen to visit their country.

Obviously, it is too early to forecast the outcome of the pending visit, which will be in the form of a reconnaissance to ascertain prospects for future trade. But at least it is an indication of the desire of both countries to return to normal trading.

Road Casualties

FIGURES released by the Ministry of Transport show that accidents on the roads in Great Britain in December resulted in 881 deaths. This was 185 more than in December, 1958, and the highest monthly total since December, 1941, when the streets at night were blacked out. The total for all casualties in 1959 was 333,453, an increase of 33,686 on 1958.

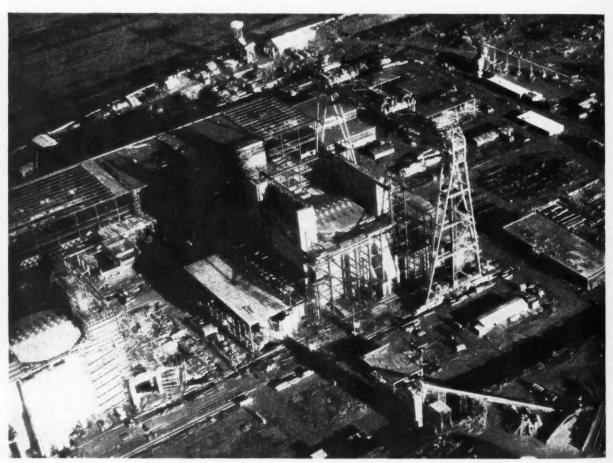
These figures present a challenge, both to road users and designers, but above all to the Government to take every possible step to combat this rising toll.



One of the massive concrete structures which will support the 93.5-MW steam turbo-alternators

HINKLEY POINT NUCLEAR POWER STATION

Civil Works Substantially
Complete on £60m.
Project



Aerial view of Hinkley Point. On No. 1 reactor the charge floor walls are complete and installation of the 67ft. diameter pressure vessel is proceeding

CIVIL engineering works on the site of the £60m. Hinkley Point atomic power station, Bridgwater, Som., are now substantially complete and the labour force, reaching its peak of 2,000, increasingly concerned with the tallation of equipment. The equipment. installation mechanical engineering phase of the work is now in full swing.

work is now in full swi
In terms of concrete
235,000 cu. yd. have
been placed out of
the 300,000 cu. yd.
required in all, by
Taylor Woodrow
Construction. Ltd.
The main shielding
walls of the first
reactor are complete
and stand 160ft.
above the general
station level. These above the general station level. These station level, shield walls, which also include the pile structure, are cap structure, are now nanked on two sides by massive con-crete plinths, 30ft. high. The plinths will support the six steam raising units, three on either side of the reactor build-ing. Beyond these ing. Beyond plinths are two blower houses which steelwork has been erected and ing completion.

Considerable headway has also been made on the second reactor, the shield walls being complete up to pilecap level.
Work is now proceeding with the pilecap structure. Altogether, on the two reactors, a total of

86,000 cu. yd. of con-crete have been placed and 1,920 tons of structural steelwork erected.

work erected.

Construction of the largest turbine hall in Europe and its extension building is also well advanced. The main walls and floor of the basement have been completed and two of the main turbo-alternator blocks have been finished. Steelwork for the superstructure is in position and cladding is proceeding. In this building and its foundations, some 40,000 cu. yd. of concrete have been placed and 1,820 tons of structural steelwork erected. of structural steelwork erected.

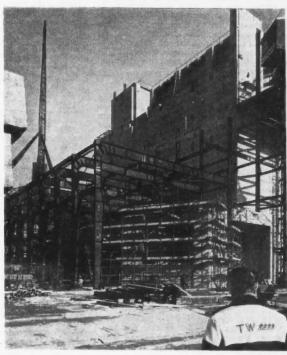
The shore-end of the cooling water system is substantially complete and ready for installation of equipment; the roof of the 90ft, deep pumphouse is now being finished. The two 11ft, diameter water tunnels and the 7ft, diameter access tunnel have now been driven out to a point just short of the position of the intake structure, 2,000ft, off-shore. This structure is being built from the caisson unit which was floated out and sunk into position in June last and which is now linked to the shore by an aerial ropeway. The caisson lune last and which is now linked to the shore by an aerial ropeway. The caisson has now been pumped free from sea water and is ready for construction of the foundations and the tunnel junctions. The outfall works have been completed within a sheet piled cofferdam, shortly to be re-moved, projecting 800ft. across the fore-shore. shore.

In parallel with the construction of the major works, the complicated patterns of services have been installed with minimum inconvenience to the movements of traffic around the site. The two and a half miles of roads put down during the first five months' work on the contract have eliminated access and vehicular movement pro-blems. Ancillary buildings such as the workshops, administration buildings, can-teen and welfare block are now under construction

Cable subways, which were installed at an early date, enable main cable laying from the transformer annexe to the switch-gear compound and from the reactors to the central block to be carried out without interference with other operations.

Sea-Borne Equipment

A steady flow of heavy parts is arriving by sea at the specially built wharf at the reconstructed Roman port of Combwich



to support the steam-raising units, be completed biological shield of No. 1 reactor Steelwork beside

on the river Parrett, five miles from the site on the Bristol Channel coast. Some 30,000 tons of cargo are expected at the wharf, which has a radio link with ships up to 25 miles out at sea.

Already many of the prefabricated sections of the steam raising units and the receptor.

reactor pressure vessels have reached the site via Combwich from the Renfrew and

Dalmuir works of Babcock and Wilcox in Scotland. The ring sections, 2½in. thick, are being welded together on site to form the 12 steam raising units, each 90ft. high and 21½ft. diameter, which will provide steam for the turbo-alternators.

The preformed sections of the two 67ft. diameter spherical pressure vessels for the reactors are now being fabricated into courses for site erection. Nearly half of the shell for No. I reactor is in position inside the biological shield. The large inside the biological snield. The large tubular diagrid structure, weighing nearly 170 tons, to support No. I reactor core, was shipped to site in four sections. It has been assembled and is now ready for installation inside the lower half of the pressure yessel.

Manufacture of the main electrical equipment at the Rugby, Stafford and Netherton plants of the English Electric Co. is well advanced and delivery from the Netherton works has already been made of the first condenser. In all, six main turboalternators, each of 93.5-MW rating, and three variable speed sets each of 33-MW, are being provided, the latter designed to provide power for the gas circulators.

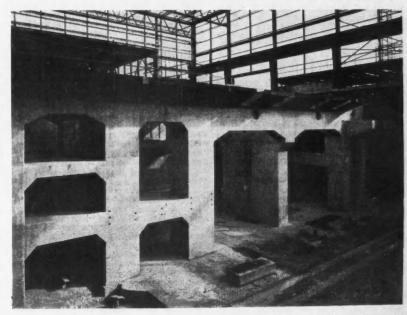
The twelve gas circulators, each consisting of a single-stage axial blower, driven by a squirrel-cage motor of 7,000-h.p. capacity are being made at the Whetstone Works of the English Electric Co., which is also the design and development centre for work on the station. The first of the circulators will be delivered to site in the middle of 1960. middle of 1960.

The station is expected to be in commission in 1962.

EDINBURGH REJECT DIRECT LABOUR PROPOSAL

Edinburgh Corporation have decided not to establish a direct labour department. The proposal came from the Edinburgh Trades Council and was opposed by the Edinburgh and District Master Builders Association and the Electrical Contractors Association of Scotland.

Mr. A. M. Carmichael told the Corpora-tion that the contractors in the city could meet all commitments, and provide a faster, and more economic, service than could be offered by any direct labour department. He also objected to any pilot scheme on the grounds that such schemes were very often the thin end of the wedge, and that an experiment tended to become a an experiment tended to permanency.



Another view of the concrete structure in the turbine hall built to support the turbo-alternators

ECONOMIC PLANNERS UNDER FIRE

N.F.B.T.E. Annual General Meeting

SOME trenchant criticisms of "our economic planners" were made by Mr. T. V. Prosser, retiring president of the National Federation of Building Trades Employers, when he spoke at the annual general meeting of the Federation in London last week. He said that effective development of the building industry was only possible in an atmos-phere free from the threat of frequent interference by financial policies arising from economic necessity. "Our economic planners," he said, "con-

tinue to support the doctrine that the national economy should be allowed to develop regardless of the influences which radiate from our actividoctrine should be re-examined having regard to the steadily increasing demands for our services inspired by essen-tial needs which



tial needs which have clearly established our industry as the largest industrial unit in a nation whose very existence is dependent upon industrial virility.

"Because of our size and ramifications we have far-reaching effects on the whole of the commercial and industrial activities of the country, and with this heavy responsibility on our shoulders we have a duty to develop our efficiency to the maximum degree. We accept this responsibility and have done much in our work towards this goal with improved and greatly and have done much in our work towards this goal with improved and greatly widened educational courses for operatives and management personnel, by constant research and the introduction of new techniques, by mechanisation, and by training in new skills.

"If we can be free to develop our maximum efficiency." Mr. Prosser continued, "and thereby minimise our demands on the public and private pocket, the need to interfere with the volume and flow of work would be reduced."

The operatives' leaders were only too willing and ready to co-operate in a drive towards increased productivity and all the attendant benefits, such as greater hours of leisure, which would result from its attainment.

If there were any doubts in the minds

If there were any doubts in the minds of some people as to their unity in this common purpose, he would ask: "Where else will you find such a highly developed form of peaceful co-existence as we enjoy in the building industry?"

Restrictive Practices

The retiring president then referred to the Restrictive Trade Practices Act and said that the Registrar of Restrictive Trade Practices had served Notice of Reference in respect of the agreement of the Birmingham Association. The National Federation had been appointed the representative respondent because there was no sentative respondent because there was no doubt that, whatever decisions the court might reach in regard to the Birmingham agreement, the Registrar would sub-sequently invite all Associations within the

National Federation to amend their agreements accordingly.

He said that as he understood it, the Federation would have to show to the Court that the agreement among members of the Birmingham Association to recommend the use, for instance, of agreed day-work rates or agreed haulage rates, or the same forms of contract, were not only in the public interest, but in fact conferred a substantial benefit on the public,

The court was not primarily concerned to rule as to whether the National Schedule of Daywork Charges represented a fair basis of charging or whether the limit in the National Quantities Rule was correct. What it would be asked to decide, for example, was whether it was permitted by the Act for the members of the Birmingham Association to agree together a fair and reasonable basis for charging for dayworks or the limit of value above which quantities must be supplied.

He said he had no reasonable doubt of the outcome of the case. Private Housing

Earlier in his speech, Mr. Prosser had spoken of the activities of the Federation of Registered House-Builders. It gave him considerable satisfaction to note that last year the number of dwellings built for private sale exceeded the number built by local authorities for renting for the first

local authorities for renting for the first time since the war.

"There is still a long way to go before we reach the annual totals of houses for private sale achieved in pre-war years," he said, "but the trend is clearly defined. To some extent economic necessity is stimulating this trend, for a private house purchased with the aid of a building society mortgage costs in the full term only 1! times the selling price whereas a house of the same value built for local authorities with the aid of borrowed funds costs the country two and a half to three times the original price after taking account of subsidies.

"Excessive funds locked up in this way

Excessive funds locked up in this way are an embarrassment to the flexibility of the national economy and our industry can naturally assist in relieving this pressure, but the big problem here, as indeed with all forms of building, is the availability of land."

The speaker pointed out that the Federation had set up a working party to examine the whole question of land for essential housing development, paying strict regard to the expanding needs of the future, and when their report was ready they would be making representations to the appropriate authorities. If more land were not available quickly we should be faced with the most serious crisis in the years ahead. On the subject of safety, Mr. Prosser said that the Federation's campaign to reduce accidents in building continued and they had just published a booklet giving guidance to building firms on how to organise themselves to prevent accidents The speaker pointed out that the Federa-

to organise themselves to prevent accidents happening on their sites.

Industrial Relations

Following his speech, the retiring president invited discussion on the Federation's annual report, taking first the subject of industrial relations.

The annual report states that the recent settlement on working hours could be regarded as satisfactory. The operatives' leaders had not sought to depart from the principle that the standard rate of wages was calculated on the basis of a 44-hour week, and they had sought no compensating wage increase in respect of those districts where the 46½-hour week had

been worked.
Taking up this point, Mr. G. Banks (W. Kent) wondered whether the outcome of the settlement could be regarded as satisfactory. He said that there were the settlement could be restricted as a satisfactory. He said that there were members of the industry whose maxim on wage negotiations was. "Find out what they are asking for and give as little as possible." What was wanted was a sufficient labour force of sufficient quality. Constant small payments must be avoided. but to progress employers must be prepared to buy quality.

Mr. H. Shouksmith (York) agreed with the last point, adding that the building industry was a very long-term industry and as such there should be long-term agreements with the operatives. He thought that the American system of three-year contracts with their building operatives might be looked into, and also suggested a graded system of increases so that any variations could be allowed for in pre-

paring tenders.

Mr. J. B. Ratcliffe, D.S.O. (Caterham) said that bearing in mind the relationship of output and wages more advice should

of output and wages infer advice should be sought on the use of incentive schemes. The chairman of the Wages and Conditions Committee, Mr. L. A. Walden, C.B.E., said that the subject of demarcation between water ware ware levels. tween unions whose work was closely related, such as the plumbers and heating fitters, was receiving the close attention of the committee, and an invitation had been sent to all regions to send in their ideas on how the problem could be tackled.

Apprentices

There was a spirited discussion on rate

There was a spirited discussion on rate of apprentice recruitment into the industry, which according to the annual report is "far from satisfactory."

Mr. Prosser confirmed the opinion of one speaker that there was a large bulge of the 35-45 age group in the industry. The annual report, he said, emphasised the importance of apprentice intake. A special importance of apprentice intake. importance of apprentice intake. A special appeal was being launched to companies to take in more and he hoped that 1960 would be a bumper year for recruitment. The industry could not afford not to

The industry could not afford not to afford them.

Mr. R. Braybon (Brighton) asked, "Are we getting the right type of boy?" There were many boys available without the right requirements, he stated, but building needed boys who were capable of being trained. The job must be made to look attractive if labour of the necessary quality was to be recruited.

attractive if labour of the necessary quality was to be recruited.

Quoting from the annual report, Mr. A. H. Pope (Swindon) drew attention to the fact that the number of apprentices in all trades at the end of the year was 32,477 compared with 35,841 at the end of 1958. "Another 3,000 gone down the drain at the same time as the Government turned the tap on," he exclaimed.

He said that in his own region there existed a school of thought that apprentices were an expensive luxury. Often it was impossible to maintain an apprentice team, especially when another contractor moved into the area paying piecework gangs and above union rates.

Accidents

Mr. Walden stressed the vital importance of the application of accident prevention measures. The Federation had been reminded by the Chief Inspector of Factories of the fall back in the number of accidents and fatilities in their industry. He hoped that all regions would give close consideration to the Federation's new booklet—"Organise for Safety—A Guide for Building Firms"—and implement its recommendations.

He also pointed out that the Royal Society for the Prevention of Accidents had for the first time decided to award the Sir George Earle Trophy to a unit of the building or civil engineering industries which made the greatest contribution to safety during 1960. This, he thought, should stimulate the interest of the Federation's members in accident preventions.

vention.

Direct Labour

Mr. C. G. Drewitt (Bournemouth) was seriously concerned over the question of direct labour building operations by local authorities. This, he said, was a menace to the industry and a challenge which the

"It is up to us to tender in strict competition with direct labour," he stated. "If not direct labour will grow until it crushes us all."

The annual report was adopted by the meeting.

meeting.

New President

Mr. D. E. Woodbine Parish (London) was installed as president for 1960. On taking office he said that basically he saw (Concluded on page 716)

RECENT DEVELOPMENTS IN THE DESIGN OF HIGHWAY BRIDGES

WITH introduction of new ideas and W techniques the post-war years, particularly, have seen a number of advancements in the design and con-struction of bridge structures. Just how much progress has been made was outlined last week in a Paper "Recent Developments in Highway Bridge Design," presented at a meeting of the Institution of Highway Engineers in

London.

The authors, C. S. Chettoe, B.Sc., M.I.C.E., and P. F. Stott, M.A., A.M.I.C.E., began by describing highway loads, design loading, road layout, general design theories and methods, and foundations. They then went on to discuss steel and concrete bridges as follows:

Although steel as a material of bridge construction has been in use for a long time the last few years have seen advances in steel making which have made more generally available higher quality materials. There is now a guaranteed yield point for mild steel. This has led to minor changes in B.S.153. mild steel. in B.S.153.

Considerable attention has been focused Considerable attention has been focused on the danger of brittle fracture in mild steels by the failure of a large bridge in Canada. Certain steels show a change in character at low temperature, losing their ductility and becoming brittle. In this condition the material is liable to cracking starting at points of high stress concentration such as connections, and welding or metallurgical defects, and propagated in such a way as may become catastrophic in welded structures. Where the danger exists the use of a notch ductile steel to B.S.2762 is desirable especially for thicker B.S.2762 is desirable especially for thicker

Improved Steelmaking

High tensile steel has become more easily available generally to B.S.548, and to B.S.968 in weldable quality. The use of these steels has now become economical for medium as well as long spans.

The use of low alloy steel has not progressed as fast as some have hoped, B.S.15 includes two copper bearing steels of which one with 0.20 per cent. to 0.35 per cent. copper gives reasonable resistance to corrosion. In the high tensile range there are steels such as Corten with even better

resistance.

In the field of corrosion generally and of In the field of corrosion generally and of protective treatments considerable developments have taken place, due to a great extent to the work of Hudson and his colleagues at the British Iron and Steel Research Association.

Details are better designed for accessibility and painting than formerly. The welded box sections and tubes now coming into common use have obvious advantages.

into common use have obvious advantages in this connection.

in this connection.

Preparation of surfaces by shot or grit blasting is now widely adopted and is much more satisfactory than scraping and wirebrushing. Sprayed metal coatings of zinc or aluminium are recommended and are generally used where steelwork is not easily accessible or is in exposed situations and/or salt-laden atmospheres. Paint coatings have improved and intervals between painting have correspondingly increased.

painting have correspondingly increased.

Following improvement in steelmaking and design techniques the basic stress for mild steel has been increased to 9 tons per square inch with many variations in actual stresses according to circumstances, but with a general factor of safety of 1.7 on yield stress. The absolute maximum combined stress allowable must never exceed 14 tons per square inch for mild steel with comparable stresses for high tensile steel. tensile steel.

Fatigue is now more satisfactorily covered in B.S.153. In the old standard it was provided for where reversal occurred

by the addition of half the minor stress to the major in members, and the whole of the minor stress was added to the major for joints. Tables are now available giving a factor K to be applied to the basic permissible stress. This factor depends on the ratio of minimum to maximum stress, the number of stress repetitions, the quality of the steel and the method of fabrication. It therefore covers the effect of fluctuation of stress without reversal. No allowance is made for fatigue in compression members.

Advances in the design of struts, trusses, plate girder flanges, webs and stiffeners affect stresses as well as other matters. These, set out in the new B.S.153, are based on first principles, recent research and consideration of the latest practice in other countries.

Connection Method

The most radical developments in steel bridge design and practice have taken place in connection methods. High strength bolts are now frequently used. There are German and American Codes of Specifications for them, but no Standard of Specifications for them, but no Standard in this country as yet, though the British Standards Institution is considering design and field practice. These bolts grip the plates tightly together, but do not completely fill the holes as fitted bolts do. They therefore do their work entirely by tension and friction, and not by shear and bearing. Numbers are normally the same as those of the rivets which would be required for the joint, but they are cheaper to install—about 25 per cent. and there are many other advantages. They require less labour, can be used in tension, are noiseless to fit, easy to tighten and do not work loose. They can be used both for assembly and for final tightening.

Present practice is therefore moving in

Present practice is therefore moving in the direction of using these bolts for site connections, while welding is increasingly used for shop work. Among developments in welding have been greater radiographic inspection in suitable cases, minimum area welds to reduce distortion, and larger electrodes. Tests for welders are laid

down in B.S.2645.

Before the war small steel bridge decks were usually built of R.S.J.'s in concrete, or steel girders and jack arches. Reinforced concrete decks in association with steel girders were also used, and the main girders were sometimes cased in conmain girders were sometimes cased in concrete to reduce maintenance costs. This increased dead load, and the condition of the embedded steel was not always safeguarded. Present-day practice continues the use of R.S.J.'s in concrete, using the greater range of joists and beams now available and even what are called castellated beams (i.e., with holes in the webs); and, for rather larger spans, steel girders carrying reinforced concrete decks monolithic with them. In all these cases, where provision is made for interaction between the two materials, they are treated as a composite member for purposes of calculation. There is a German specification for composite design, and steps are being taken to initiate a Code of Practice for this country.

this country.

In the past, plate girders were not much In the past, plate girders were not much used for spans above 100ft., and continuity tended to be limited to three spans. Trusses were used for longer spans, and arches also in appropriate circumstances. A tendency, very apparent in bridges and viaducts on the German autobahn, developed before the war in the direction developed before the war in the direction of extending continuity over a number of plate girder spans, fixed at one end and free at the other. This involved consider-able movements over the intermediate piers, which were taken up by elastic movement of the piers or by roller bear-ings. It may now be said to have become a standard practice; in many cases, how-ever, we see a main crossing with three or five continuous spans and an approach viaduct on each side having shorter spans.

Examples are the Queenhill Bridge,
Worcestershire, now under construction,
and the Neath Viaduct, South Wales.

Recent developments in methods of calculation and design aided by special local conditions have led to the construction of some remarkable steel continuous girder bridges in Germany.

The superstructures of these bridges have been designed as single units subject to bending and torsion from loading asymmetrically disposed transversely, and consist of a series of girders connected by consist of a series of girders connected by diaphragms supporting a deck monolithic with them. There may be also a steel plate soffit so that the complete superstructure consists of a box. All these German bridges—of which there are four—are constructed across the Rhine and are three span continuous. Three of them have centre spans in excess of 600ft. They are cutter greater in appearance but it is centre spans in excess of 600ft. They are quite spectacular in appearance but it is doubtful whether such large spans are economically possible in general. Special circumstances obtain on the Rhine, as very large units can be fabricated in the Rühr and floated up the river to the

Rühr and floated up the river to the particular site.

This general type—continuous with curved soffits, or with constant depth over long viaducts—has become very popular, and has largely ousted the truss bridge. This is, no doubt, largely on account of its better appearance. Truss bridges, however, are still being built for fairly large spans: An example is that at Auckland, New Zealand, with a maximum span of

Steel arches have been built comparatively recently for spans as low as 300ft.; but are not likely to be used much for moderate spans in future. Suspension bridges, again, have been used for short spans (as at Chelsea) but are more appropriate to spans over 1,000ft.

New Types

New Types

The development of the monolithic type of deck above described (in Germany called "orthotropic") has led to the evolution of some new and rather surprising types of bridge which derive from the self anchored suspension bridge. The best looking is probably the Nordbrücke at Dusseldorf. The main part of the bridge has three spans; the deck is carried by three parallel cables on each side supported by a pair of single pylons unbraced across the roadway. Another development is an even starker bridge about to be constructed at Hamburg, with two pylons only in the middle of the roadway and three cables fanning out in a vertical plane. It has affinities to the much larger and perhaps uglier Severin bridge at Cologne, which is asymmetrical with one pier in the river and a single pylon of inverted V-shape. It is a relief to turn from these to the Rodenkirchen suspension bridge whose span of 1,240ft. is rather bevond our range.

The deck details of these bridges are of interest. The roadway usually consists of a steel plate on which two layers of asphalt are laid; sometimes steel strips welded to the plate are employed as retainers for the asphalt. Alternatively a concrete deck on which the asphalt is laid may be cast on a supporting plate and linked to it with shear connectors. The former type is very suitable for large bridges or opening bridges which require a light deck. The most recent developments in decking include the substitution of a thin coating of resinous paste to the plate deck in place of the asphalt, and the use of open steel grids in places where the small openings in the deck do not constitute a hazard,

Where a reinforced concrete deck is associated with continuous deck girders and is to act compositely with them, bridges or viaducts have sometimes been prestressed" in order to put the deck into "prestressed" in order to put the deck into initial compression by jacking down the supports after construction. This method has been used in two notable German bridges—the Werra and Wüppertal viaducts—both of which were constructed to a convex profile but afterwards jacked down to a sagging curve tangential to the falling approaches. The Wüppertal viaduct, in the Rühr, is of novel type. It has a steel trough section internally braced, with a deck of concrete.

Concrete Bridges

Recent developments in the design and construction of concrete bridges have been

construction of concrete bridges have been largely in the field of prestressed concrete. Before proceeding to consider prestressed techniques it may be appropriate to review the present situation of design and construction in reinforced concrete.

In the general run of bridges reinforced concrete has now been much lessened in its application by competition from prestressed construction. For spans over 50ft, and up to 500ft, or more, prestressed concrete is now almost invariably adopted. For spans of the order of 50ft, or less reinforced concrete may still be competitive where special conditions operate; but tive where special conditions operate; but there seems no doubt that when the element of repetition enters, such as where a number of bridges of the same size are to be built over a motorway, in-situ reinforced concrete construction even with simple and repetitive shuttering may not compete in price against precast pre-

stressed beam units.

It is reasonable to ask whether the change in method which has largely taken place from reinforced to prestressed design is due to the inherent cheapness of the new is due to the inherent cheapness of the new construction which employs so much higher stresses than were earlier con-sidered appropriate, or whether some of the fault lies in the stagnation of techniques of design in reinforced con-crete. In general it is the combination of high strength concrete working to high stresses which has given impetus to pre-tressed construction but there remains stresses which has given impetus to pre-stressed construction, but there remains a certain field in which it is possible that an opportunity has been missed of ad-vancing the application of reinforced con-crete with such a combination.

In the opinion of the authors, and sub-ject to safeguards in the drafting of regula-

tions, reinforced concrete using high tensile deformed bars would show con-siderable advantages. It is envisaged that the calculations of strength would be on the basis of ultimate load theory, and that an overriding check would be applied to ensure that the crack widths occurring in service would be within safe limits when corrosion was considered. The valuable work which is incorporated in the Swedish tentative standard specifications gives a tentative standard specifications gives a promising starting point for the developpromising starting point for the develop-ment of regulations incorporating this attitude to design. Such an advance in design technique could only be made satis-factorily if every aspect of a structure in which it was to be adopted was rationally investigated and due allowance made for stress effects. For instance, specific allow-ness would be desirable for settlement of ances would be desirable for settlement of foundations where this would induce stresses in the deck structure.

Even though reinforced concrete bridges

Even though reinforced concrete bridges as such are less common in these days, secondary members in reinforced concrete are still vital parts of bridge structures. There has been a tendency to adopt prestressing as an end in itself, to be used whenever feasible, and this has given rise to a large family of bridges stressed transversely as well as longitudinally. While some of these applications are well justified it is now coming to be realised that reinforced concrete transverse members can be in many cases equally effective in action and more convenient and economical in construction. economical in construction.

The great developments in the design

of prestressed concrete bridges have been

the result of advances in technique in a number of related fields.

First, reference must be made to the increasing body of knowledge about the fundamental properties of the materials of construction and in particular of the pro-perties of concrete. Seen in retrospect it is rather strange and not at all easy to understand why the use of concrete under appreciable stress as a structural medium has gone on for so many years in this century without there being available really comprehensive data on its basic properties. It is only now that research workers are bringing our basic knowledge into step with the demands of current practice. Field observations on concrete structures, difficult though they are, are still required to throw light on the real behaviour of full-size structures as contrasted with the behaviour which would be

inferred from laboratory experiments.

Developments in high tensile steels and knowledge of their properties have also

Readers

HAVE YOU POSTED IT?

IF YOU HAVE NOT already returned the Readership Survey Card sent with last week's issue, may we ask you to do so as soon as possible?

THIS SURVEY which is being undertaken by the publishers of "The Contract Journal" will benefit both readers and advertisers and your co-operation will be greatly appreciated.

greatly affected the progress of prestressed concrete. The strengths of standard grades of wires have been improved by manufacturing techniques and the long-term creep characteristics have been evaluated. The production of high tensile har and the metallurgical techniques assoevaluated. The production of high tensile bar and the metalurgical techniques associated with it have advanced to a point where a satisfactory standard can be where a satisfactory standard can be guaranteed. The newcomer among stress-ing tendons is high tensile wire strand. Originally developed by American wire rope manufacturers its introduction and use in this country has been stimulated by new methods of anchorage design not involving the socketing technique deriving from wire rope practice. The introduction from wire rope practice. The introduction of this new material affords an illustration of the difficulties of work in these spheres where rapid development in use outstrips basic research on the properties of the material. Only now, some time after initial production of such strands, satisfactory evidence of the magnitude of long-term creep effects in the material is becoming available.

Surface Finish

The greatly increased use of concrete in bridge construction has focused atten-tion on the problem of surface finish. There is now general recognition of the need for careful consideration of finish. but some recent work in this country still compares unfavourably with corresponding practice in Germany and elsewhere.

The main types of finish available are:
(a) Generally "as cast"—Under this head come various types of shuttering arrangements, e.g.—(i) plywood or other smooth finish; (ii) board marks forming a pattern; (iii) steel shutter marks forming a pattern; (iii) hearing the pattern of the pattern o (iii) horizontal or vertical marking or grooves at construction joints; (v) patterned plastic shutter linings; (b) special surface treatments—(i) rubbing down from shutters to give a smooth finish; (ii) bush hammering (iii) shot or grit blasting; (iv) scrubbing to expose aggregate (for small or precast members); (v) transferred aggre-

gate (see below).

With exposed aggregate treatments such as those under (b) above, special aggregates

as those under (b) above, special aggregates and cements are sometimes used.

Some countries, e.g., Sweden, have always favoured a smooth finish, for which very good concrete is essential, and on the whole this method has been gaining ground whole this method has been gaining ground on the Continent. Narrow board marks are effective in some circumstances—for example on the recent Ludwigshafen flyover. Elsewhere a smooth finish with rather crude and coarse grooves or rectangular panels has been used as on the Bingen Bridge. A faint indication of rectangular panels (steel shutter marks) as on the Tancarville Bridge near Le Havre, is often better.

as on the Tancarville Bridge near Le Havre, is often better.

For precast blocks and sometimes in-situ work also, transferred aggregate methods depending on the placing of special aggregate on the moulds have been developed. These, for bridges, may be best suited to large-scale work (Forth Bridge piers) where they are not seen from close quarters. Bush hammering, scrubbing and shot blasting are probably the best methods of treatment for general use, though the others may all be satisfactory in special circumstances. Quite light bush hammering or shot blasting are often most suitable as these methods should not crack or split the aggregate itself. The advantages or split the aggregate itself. The advantages of bush hammering is that it can give some variety to the appearance of concrete depending on the aggregate used.

(Concluded from page 714)

a solution to most of the Federation's problems in education and training, and looked forward to visiting all the regions.

He paid a glowing tribute to the work done by Mr. Prosser during the past year. Mr. Cecil R. Setter (South West) was elected to the senior vice-presidency, and Mr. Frank Russon (Birmingham) and Mr. Lawrence J. Holloway (London)
elected first and second junior
presidents, respectively. Mr. J.
Robertson (Burton - on - Trent) be became honorary treasurer.

Medals Presentation

Before discussion on the annual report, e retiring president presented the silver and bronze medals awarded by the Federa-tion under its prize scheme for 1959.

Mr. T. H. Huxley Turner, C.B.E., chairman of the prize scheme sub-committee, said that there was the usual high standard in the craft section, but the sub-committee were particularly gratified by the uniformly good standards in the trainee section. The difficulty in selection had led them to recommend the award of three bronze medals in this section.

The prizewinners were:

Craft Apprentices

Silver Medal — Joseph T. Aspinall, ioiner, employed by George Platt and Sons. Ltd., Liverpool, and nominated by the Liverpool Federation.

Bronze Medal—Brian John Barber. bricklayer, employed by J. Parnell and Son. Ltd.. Rugby, and nominated by the Midland Federation.

Building Trainees

Silver Medal — John Barker Turner, building surveyor, articled to Ackroyd and Abbott. Sheffield, and nominated by the Yorkshire Federation.

Bronze Medals—Anthony Clark, build-ing surveyor, articled to M. Clark, Retford, and nominated by the Midland Federation. and nominated by the Midland Federation, Kenneth R. Moss, surveyor/estimator, articled to A. Roberts and Co., Ltd., London, and nominated by the Southern Counties Federation; Brian Martin Hall building surveyor, articled to J. Jarvis and Sons. Ltd.. London, and nominated by the London Master Builders Association.

Mr. Kenneth Moss is now in Trinidad and his medal was accepted on his behalf by his father.

CAPESORS FOR HUBE

- Mobile
- Portable
- Stationary
- Diesel and Electric
- 18 to 630 cu. ft. f.a.d.

also

SCREED VIBRATORS



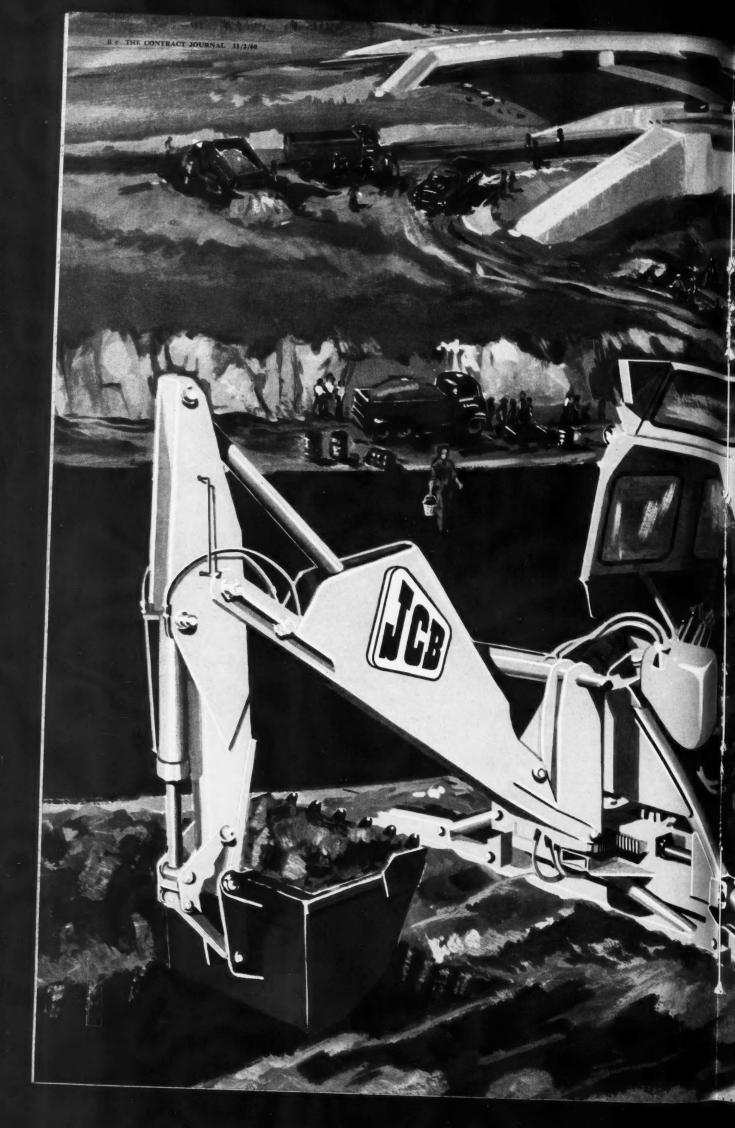
CONTACT US FOR SERVICE

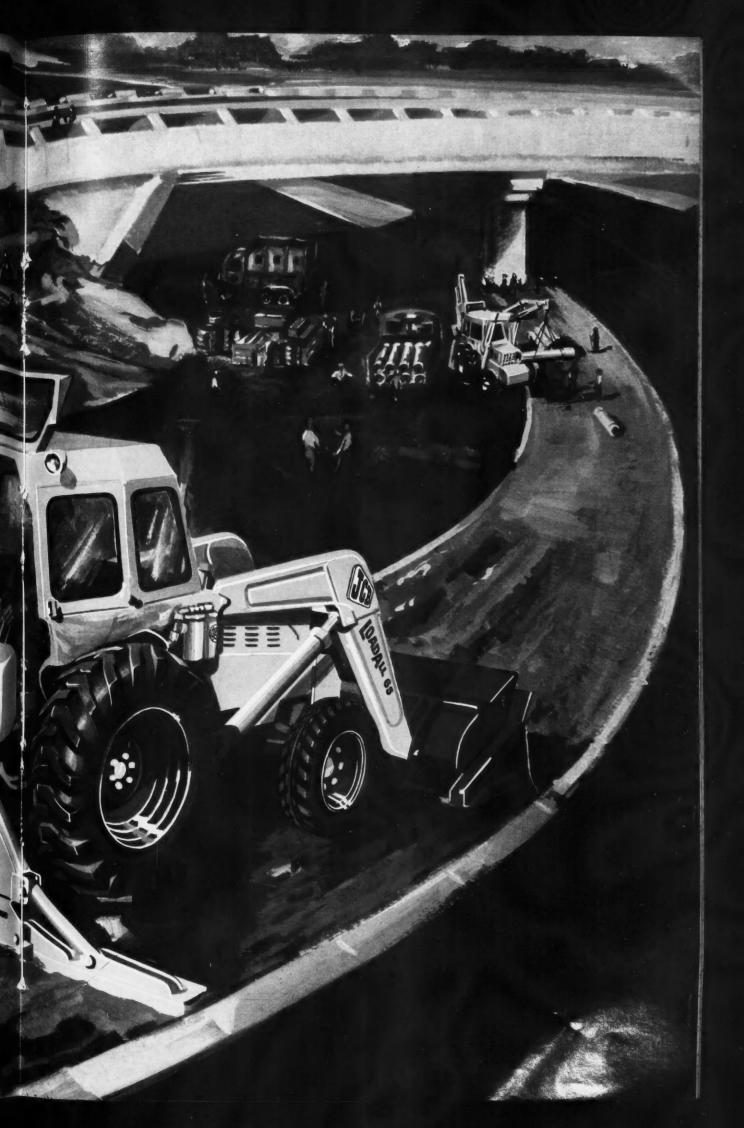
CONTRACTORS SERVICES LTD

65 EFFRA ROAD, LONDON S.W.2

TELEPHONE BRIXTON 4081

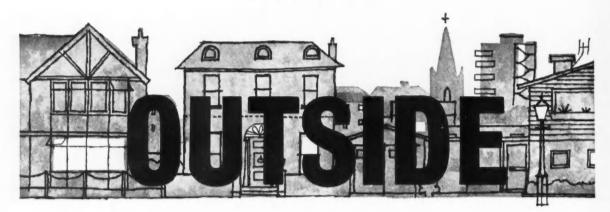
⊕CS26







for the



where



must do more than decorate



ASSOCIATED LEAD MANUFACTURERS LIMITED

LEMENTS HOUSE, 14 GRESHAM ST., LONDON, E.C.2 · CRESCENT HOUSE, NEWCASTLE · LEAD WORKS LANE, CHESTER

John Sumner's Notebook . .

NOT so long ago there was a distinct move being made by certain industrialists to get the Government to finance apprenticeship to the extent of employers being allowed tax relief from the cost of training under orthodox schemes. I seem to remember Sir Godfrey Ince saying, as president of the British Association for Commercial and Industrial Education that if the Government was serious about

I seem to remember Sir Godfrey Ince saying, as president of the British Association for Commercial and Industrial Education, that if the Government was serious about the vital necessity to increase training during the years that young persons are available it seemed a small price to pay... to provide an incentive in the form of additional tax relief.

On the face of it this seems to be a good idea. It would certainly remove from the mouths of many employers the complaint that engaging apprentices is an expensive business which they can illafford. More long-headed employers, however, see a major danger in such an arrangement. It would give the Government a stake in industry which it would be difficult to remove. Once that stake was established it wouldn't be long before Government departments would be telling industry not only how many recruits were to be trained but how, where and in what subjects. It might well be that rates of pay would become a matter for departmental decision, and that would be the beginning of the end of wage bargaining as we know it in industry today. Imagine what would happen. Whitehall would get worried about the intake of building apprentices and inform the industry that another 3d. or so per hour might be a sufficient inducement to school-leavers. The industry would refuse to accept the suggestion—but only so long as the tax relief operated; it would have to agree in the end. Enter Sir Richard Coppock and his merry men: "Three-pence for the apprentices—jolly good idea. Now what about my craftsmen. I think they should have three-pence, too." And who would be able to argue?

No, as things are at present, training for industry is management's responsibility—financially and educationally.

No, as things are at present, training for industry is management's responsibility—financially and educationally.

THERE is an idea, though, that might well be worth looking into. It is contained in a book* just published, by Dr. Kate Liepmann. The author believes that the system of apprenticeship, as it exists today, is so at odds with the national interest that the roles of employers and technical colleges should be reversed. Industry would then no longer decide, as it does today on an ad hoc basis, the number of apprentices to be engaged nor have the responsibility for training them. These views are largely based on a detailed study of apprenticeship arrangements in engineering, printing and building firms in the West Country. The general conclusion Dr. Liepmann reaches is that the state must take "the prime responsibility for training for industry both in its quantitative and its qualitative aspects." She sees a situation where both practical and theoretical full-time education would be given at technical colleges with part-time release to the works and building sites. Training time would generally be curtailed.

This book is well worth the attention of those interested in or concerned with training for industry, for it tackles a controversial subject in an objective and dispassionate way. There is, as I see it, one big snag to Dr. Liepmann's theory, though. Builders, to take but one section of industry, already know the average "Apprenticeship: An Enquiry into the Adequacy under Modern Conditions," by Dr. Kate Liepmann Published by Routledges

*"Apprenticeship: An Enquiry into the Adequacy under Modern Conditions," by Dr. Kate Liepmann. Published by Routledge and Kegan Paul. Price £1 3s.

academic quality of those who leave school and seek an apprenticeship. It isn't very high. It's only after a year, or maybe two with some, that they begin to brighten up their ideas. Many never do and drift away. If full time technical education at the If full time technical education at the colleges could achieve in, say, three years, what the primary and secondary schools have been unable to achieve in 11 all would be well. My guess is that many builders will say that there isn't even a remote chance of it doing so. They would like to be proved wrong.

THERE is no knowing what some local authorities will be up to next in the housing business. Hartlepool Town Council is to build 30 houses for sale to the public. The minimum deposit will be £5 and prices will be from £1,800 to £2,200, according to type and size. With a deposit of £5, weekly repayments on a £1,800 house will be £2 4s. 8d. for 30 years. Of course, Hartlepool has its housing problems and Mr. L. O. Williams, the Town Clerk, has pointed out that only people living in Hartlepool, who can show a housing need, will be qualified to buy the houses. The only exception will be the Hartlepool Council house tenant, who, by buying a house will leave a Council

the Hartlepool Council house tenant, who, by buying a house will leave a Council house vacant for someone on the Council's waiting list. This is fair enough.

The money to be lent to purchasers, however, will be charged for at the rate of 5 per cent.—a lower rate of interest than that which the Council will pay to borrow it. Who pays for this hidden subsidy? If I were biased in these matters I would expect to learn soon that Council I would expect to learn soon that Council house rents in Hartlepool are going up so that tenants can help pay for the houses they can't afford to buy themselves. Perhaps Mr. Williams can tell me who will pay the subsidy?

THIS year's President of the Southern Counties Federation of Building Trades Employers, Mr. J. B. Ratcliffe brings that office nearer to London than it has been for many years. His local association of Caterham borders on the L.M.B.A. southern frontier. Mr. Ratcliffe's building interests, however, are widely dispersed over his region, for his housing estates are known in Kent, Sussex and Surrey. He is no ordinary house - builder either, as those who attended last autumn's House-Builders' conference in London quickly discovered. His talk on the housing market and selling techniques proved to be one of the most absorbing expositions of the subject it has ever been my pleasure to hear. He went absorbing expositions of the subject it has ever been my pleasure to hear. He went into some detail, too, for he gave the information that in his firm an inquiry from a customer costs between 10s. and £1 in advertising, while each sale costs between £7 and £12 under the same heading. In all, he reckons that 67 per cent. of his sales result from paid-for advertising, unidentified contacts 11 per cent., sales boards six per cent. and introductions through past customers eight per cent. Of course, Mr. Ratcliffe had a number of other interesting things to say and I was left wondering how many other house-building concerns have so tight a grip on their activities as he seems to have on his. To personal charm, ability to speak and a wide knowledge of the industry, Mr. Ratcliffe adds the quality of being able and a wide knowledge of the industry, Mr. Ratcliffe adds the quality of being able to find time for details. These attributes should stand him in good stead during his year of office in the Southern Counties Region where, probably more than anywhere else, ability to do the job is the first essential requirement for anyone wishing to hold office.

I SEE that the price of Portland Cement has been reduced by 2s. a ton in all areas of Great Britain and Northern Ireland. The Cement Makers' Federation say that in spite of a recent increase in wages it has been possible to make this reduction in anticipation of a continuing increase in output and demand. This puzzles me a little, for while everyone will be glad to learn of this move resulting from a progressive policy on the part of the cement makers, there remains the question of brick prices. Presumably it can be argued that if one group of manufacturers responsible for an important can be argued that if one group of manufacturers responsible for an important building material can bring their prices down, then it should be possible for others to do the same. So far all the information I have suggests that bricks are going or will go up in price. Perhaps the manufacturers will consider paying a visit to their colleagues in the cement industry to find out the secret of their success.

MY comments a fortnight ago on the considerations borne in mind by the representatives of building societies in assessing the loan-worthiness of houses has drawn fire from the Building Societies Gazette. The Observer says that The Gazette's reply is directed to "exponents of contemporary architecture who have tended to blame building societies for being reluctant to offer adequate mortgage facilities for non-traditional houses." That is rather a nice way of putting it. There fedilities for non-traditional houses." That is rather a nice way of putting it. There are, according to The Gazette, only a small minority of the general public, by whom market values are determined, who are as yet convinced of the advances of non-traditional housing. From this The Gazette seems to conclude that it is difficult to believe that the "goldfish bowl" type of house will ever become really popular. Who was talking about "goldfish bowls?" I wasn't. I still say that those charged with the responsibility of determining the loan-worthiness of houses are still too ready to think of the mock Tudon and olde worlde styles of the inter-war

still too ready to think of the mock ludor and olde worlde styles of the inter-war years as being "safe" for investment. If more house-builders could be encouraged in the right way by the building societies there would soon be little to worry about regarding the æsthetic appearance new houses and estates going up.

London had another film première last week, but this time with a difference—there were no gaping crowds and no glamorous actresses. Instead, something like 120 engineers were the guests of Richard Costain, Ltd., at the first public showing of a new film "Federal Highway" which records the recent B.R.F. organised visit of British engineers to see the latest developments on West German roads. Filming such a subject in the limited time available was no easy task, and the Costain Film Unit are to be congratulated on a fine achievement.

E.J.M.A. MEMBERS MEET IN MANCHESTER

The first of a series of informal meetings The first of a series of informal meetings to discuss current matters affecting the English joinery industry, was held recently in Manchester. The meeting was arranged by the English Joinery Manufacturers Association, and in addition to Mr. W. R. Price and Mr. Peter Allnatt (president and director of the Association) members attended representing firms from Lancashire, Cheshire and Denbighshire.

Among the items discussed were the

Cheshire and Denbighshire.

Among the items discussed were the grading of Swedish redwood, the use of joinery specifications in architects' bills of quantities, and the intake of apprentices into the industry.

The question of competition from the Outer Seven countries also arose and it was explained that the Association was watching closely the interests of its members with regard to actual or potential competition from the countries concerned.

MORE WORK BUT MUCH RUN AT LOSS, SAYS SOUTHERN FEDERATION PRESIDENT

SPEAKING at the annual luncheon of the Southern Counties Federation of Building Trades Employers, held recently in London, Mr. J. B. Ratcliffe, D.S.O., president, said that as incredible as it seemed the situation had now been reached where in spite of the fact that there was more work about than ever before much of it was being run at a loss.

He was referring to work in the £30,000 and above category obtained in open ten-dering and said the lowest tenderer was dering and said the lowest tenderer was not making ends meet in many cases. Often he was exchanging £1 of his money for his customer's promise to pay him 19s. 6d. In a number of firms estimating had been related not to costs but to getting just under the market price. There was a lot of tendering where the estimators did not even hear whether a job made money or a loss, let alone felt responsible. Their only appropriately the state of the foliations of the state of the loss, let alone felt responsible. Their only responsibility and test of efficiency was to see that their price was lower than the others by half per cent. or so. When some price levels were set in this way was it any wonder that they became economic?

The most efficient firms had been the first to become positive of the unrealistic nature of current open tenders in the £30,000 and above category. As a federation they were deeply concerned with this situation in so far as this was not in the interests of the general public. It was not to the advantage of the building owner or the public that prices should be below the economic level at which the industry could maintain its efficiency and development.

Advice to Members

Forecasting considerably more contract work in 1960, the President said they must be sure that any tenders put in, particularly during the next few months were correctly related to costs.

"Weigh carefully too the pitfalls of com-peting for work where the number of ten-derers exceeds the number recommended in the Howard Robertson report and later the Howard Robertson report and later-jointly agreed between us and the archi-tects as being proper and reasonable," he continued. "You'll find those numbers recommended in the Federation's code of tendering procedure. Keep your best prices for the jobs that you know are fully preplanned. Unless you have all the informa-tion well before you start there are more likely than not to be costly delays. Remember wasted time becomes more and more costly the more mechanised and highly supervised the builder makes his organisation in the interests of lowering I am sure our companies don't pay us to glut them up now with unprofitable

Annual Report

The annual general meeting of the Federation preceded the luncheon at which members considered the annual report of the Council for 1959. In spite of the apparently clear skies of prosperity, one or two threatening clouds remain, states the report. There is no clear policy statement that the Government will not, at some time in the future, use the industry as a means in the future, use the industry as a means to an end. Whilst this uncertainty re-mains complete confidence in the future is impossible and forward planning and long-term development is made unnecessarily difficult,

sarily difficult.

While the industry as a whole is fully engaged with work and with every expectation that this situation will continue for some time to come, it remains a lamentable fact that the general level of tender prices is not providing margins commensurate with those of other industries whereby an adequate allocation of resources to the vital needs of development, research, education and training can be effected.

This touches the roots of our industrial

This touches the roots of our industrial framework and colours every aspect of our framework and colours every aspect of our activities. It affects the attitude of our members not only to the basic services rendered by the Federation to the building industry but to the more specialised and advanced techniques of development exemplified by such organisations as the Building Advisory Service, the machinery of joint consultation in almost every field and the Southern Counties Building Education Trust. tion Trust.

Support for J.C.C.

The Council will continue to give unqualified support to the work of the Joint Consultative Committee of Architects, Quantity Surveyors and Builders as the focal point in maintaining proper standards of contract and tendering procedures, the report continues. It is appreciated that

members of the professions are frequently subjected to severe pressure by clients who are oblivious to the technical requirements of contract procedure and in such cases the contractor members of the building team can give powerful support to their professional colleagues even on occasions when their firmness may not, in the short term aspect, be entirely appreciated!

Training

The Council urges all members actively to support the various schemes devised for the training of future personnel at all levels. The only means of matching the apparently conflicting objectives of stable or lower prices with greater rewards and increased margins lies in improving operative and administrative efficiency, this being the only means by which this paradox may be resolved.

Every single member firm can play its part in this movement, from the individual employer personally training his single apprentice, to the largest firms with their full range of craft apprentices coupled with the employment of articled and registered student-pupils in administrative and site

offices.

Members will be aware of the intense pressure for the better training of youth that is still developing throughout the whole country, indeed the whole world. There is a serious danger that this may result in the enforcement of state-operated the world. schemes with all the accompanying rigidity and formality. The only protection against such a movement can be the active support of the individual for the voluntary schemes which the Federation has devised.

Operatives and New Techniques

The Council has noted with interest the special conference convened by the National Federation of Building Trades Operatives early in the year to discuss the effect of new materials and techniques upon our industrial agreements. Whilst welcoming the realistic attitude displayed by the operatives towards report by the operatives towards many of our problems it is felt that there is a long way to go before these deliberations reach a practical conclusion. In the meantime the employers have their own contribution to make and throughout the year the Council Wages and Conditions Committee and a special Sub-Committee have been earnestly considering the numerous suggestions which have been put forward. Concrete suggestions have been submitted to the National Federation and it is hoped that these will be accepted as a basis for joint discussion by the National Joint Council.

FORMIDABLE TASK FACES HIGHWAY ENGINEERS

WRITING in the Journal of the Institu-VV tion of Highway Engineers, the president, Mr. James Drake, says:
"1960 will, I am sure, see the

president, Mr. James Drake, says:

"1960 will, I am sure, see the Government and all sections of the public, convinced of the necessity for a greatly expanded Highway Programme and showing a determination to see that the money is available to carry it out. This is going to present us all with a formidable and exacting task, but I am in no doubt that the members of the Institution will face up to it and accept the challenge gladly and enthusiastically.

"New techniques in design and construction will be required, with the stepping up and modernisation of our operational and administrative systems to the highest level of efficiency. Quick decisions on important and difficult questions will be nacessary and some mistakes will inevitably be made; remember, however, when you do run into trouble the old Lureschire seating."

and some mistakes will inevitably be made; remember, however, when you do run into trouble, the old Lancashire saying—'t'mon who ne'er med a mistake, ne'er med owt.'
"There will be sleepless nights: the ability to improvise will be taxed to the limit and responsibility will be greater than ever before ever before.

"You will, nevertheless, have your compensation; if not in commensurate salary,

the privilege and honour of being actively engaged in working for a solution of one of the greatest national problems of

our time.
"Many of our older members will have the pleasure of carrying out schemes for which they have pressed for many years in some cases for so long that they had begun to despair. There will also be younger members who, for the first time, will have the privilege of being responsible

"Life is going to be hard, but exciting, and I trust that, at the end of 1960, you will all be able to look back on a year of adventure, achievement and satisfaction."

NEW DURBAN REFINERY

The approval of the South African Parliament is being sought to the development of a site at Reunion Docks, near Durban, by the construction of an oil refinery at a cost of £25½m. The scheme will be carried out jointly by the Shell Group and the BP Group. It is hoped that the refinery with a capacity of some 3,000,000 tons a year will be in operation by 1963 year, will be in operation by 1963.

MORE SCOTS PAINT—MORE JOBS S.A.P.M. President's Plea

Making a plea for much wider use by making a piea for much wider use by industry, local authorities and the general public of paint made in Scotland, Mr. Alexander Cameron, president of the newly formed Scottish Association of Paint Manufacturers said in Glasgow recently that if all the paint used in Scotland was made in Scotland the industry could provide unto 2 2000 more idea. vide up to 2,000 more jobs.

He thought most Scots would be disturbed by the fact that less than half the paint consumed in Scotland was produced in the country, though the industry had the immediate capacity to produce half as much again and could produce all the 13,000,000 gallons needed each year.

The total number employed in the dustry was between 1,750 and 2,000 workers. Were the industry to provide the whole of Scotland's requirements, it would be possible to double those figures.

Among the larger users of paint were local authorities, but it was an ironic fact, said Mr. Cameron, that some of the Scot-tish areas which complained most bitterly about unemployment were also those which made least use of paint produced within the country.

CANADIANS' IMPRESSIONS OF BRITISH CONCRETE CONSTRUCTION TECHNIQUES

Basic Problems Similar in Both Countries

HOW the latest aspects of British The concrete design and construction compare with those in Canada were discussed in London last week by members of the Canadian party of engineers and architects who have been on a study tour of this country during the past

three weeks.

The leader of the party, Mr. Joseph Boux, president and general

Boux, president and general manager of Supercrete, Ltd., Winnipeg, said that in the precast concrete field he had observed a large variety of roof and floor systems which were basically similar; whereas in Canada they tended to standardise on the best systems and improve them into a wider usage.

The general acceptance and wider usage of precast and prestressed concrete in the United Kingdom was probably

prestressed concrete in the United Kingdom was probably the reason for the larger number of systems available. One of the main reasons to which he attributed this trend was the excellent practical research and training facilities made available to the professional architects and engineers manufacturers and the neers, manufacturers and the

fessional architects and engineers, manufacturers and the trades by the Cement and Concrete Association. No comparable facilities were available to the concrete industry as a whole, in either Canada or the United States. The development of transit mix concrete was more advanced in Canada and the United States than in the United Kingdom. This might be attributed to a greater road congestion in this country, but he felt that the main obstacle was the resistance to change of existing construction practices, rather than physical obstacles. Probably, the principal reason for the more advanced development of ready mix concrete in Canada had been the necessity for developing winter construction techniques to a larger degree than required in the United Kingdom.

Speaking generally of concrete finishes and the manufacture of precast and prestressed concrete products, Mr. Boux said that the Canadian standards of quality were somewhat higher. "This is not intended as a criticism, but more as an expression of surprise, in that the craftsmen of the British construction industry have always enjoyed an excellent reputation. Along these lines, it appears that the problem of basic productivity and quality of labour is very similar in both our countries." quality of labour is very similar in both our countries."

More Advanced

Another speaker was Mr. W. D. Hurst, B.Sc.(C.E.), P.Eng., M.E.I.C., city engineer and commissioner of buildings, Winnipeg, who stated that the British construction industry was more advanced in precast and prestressed concrete construction than its counterpart in Canada, although first impression led him to believe that the capital costs of building in the U.K. were unduly high taking into account the relative purchasing power of the dollar and the pound.

the pound.

In so far as architectural work was concerned, he had been greatly impressed by the willingness to experiment using new design concepts and new materials, particularly in school construction. New schools were not only well planned but exceedingly. were not only well planned, but exceedingly

The work on housing developments car-

ried out by the London County Council was very impressive and appeared to provide excellent housing accommodation by British standards. It was difficult to reconcile these standards with those being demanded in Canada, where considerably larger rooms were insisted upon, as well as better facilities for heating, cooking, washing, refrigeration of food and sanitary accommodations. accommodations.



Mr. Boux (left) with other members of the party during their visit to the Cement and Concrete Association's research station at Wexham Springs

One matter that was not being given One matter that was not being given enough serious attention was the consideration of motor vehicle traffic (roadway capacity) and off-street parking. In Canada and the United States following the war there had been a phenomenal increase in motor vehicle ownership—a two thresfeld increase on top of an already to threefold increase on top of an already large car ownership. In many localities

the two cars to a family concept gave way to three even four cars to a family.

"It will be immediately appreciated what this increase did in respect to highway capacities and vehicle storage facilities," said Mr. Hurst. "Many British engineers agree with us, that if the economic picture remains rosy a similar phenomenon is possible in the U.K. If this is so a great deal more attention will have to be given to this problem."

Keener Competition

Giving their impressions, Mr. K. R. Snider, B.Arch., M.Arch., M.A.A., M.R.A.I.C., and Mr. L. Bookbinder, B.Sc., P.Eng., of Waisman-Ross and Associates, Manitoba, stated that the Canadian industry had keener competition among the various structural materials available, wood and flu-lam, rolled steel, cast in-situ, precast, and prestressed concrete.

precast and prestressed concrete.

Because of the development simultaneously in Canada of all these materials there had been no concerted effort on the whole of the construction industry to date to explore the design possibilities, and in parexpiore the design possibilities, and in par-ticular the application of precast and prestressed concrete to buildings as had been the case in Britain. On the other hand the Canadian architect appeared to have greater design scope with the variety of comparable structural materials that were readily available.

It also appeared that the Canadian architect spent a great deal more of his time in co-ordinating the mechanical, electrical and structural systems of his buildings than did his British counterpart. This was due partly to climatic conditions and partly to the influence of American technology.

The Portland Cement Association in Canada did not provide as close co-operation with consulting engineers as the British Association. British consultants received more assistance from the standpoint of scale model studies tests of beams and other parts of structures also with

point of scale model studies tests of beams and other parts of structures, along with other solutions to problems with which in general the consulting engineer did not have the facilities or time to study.

Prestressed precast concrete seemed further advanced in England than in Canada from the standpoint of using space frames, multi-storey buildings and more varied use of small prefabricated structural units.

Design methods involving new theories, model studies, computer analysis, etc., seemed to be used more and be further advanced in Britain.

Have you completed and posted your Readership Survey postcard?



Inspection of the Research Station's surface finish display area

SHELL CENTRE SITE DISPUTE

Investigation Committee's Report

THE Minister of Labour has now received the report of the Committee of Investigation which he appointed to inquire into the electricians' dispute at the Shell Centre site, South Bank, London, S.E.1. The committee finds that it is unable to recommend any extra payment to the men on strike.

Comprising Mr. Roy M. Wilson, Q.C., chairman, Mr. D. K. Rollit, O.B.E., and Mr. W. D. Goss, O.B.E., the committee was set up to inquire into the causes and circumstances of the dispute between the employers' and workers' sides of the Electrical Contracting Industry National Joint Industrial Council concerning the terms and conditions of employment of members of the Electrical Trades Union employed by F. H. Wheeler and Co., Ltd.,

at the Shell site.

In the conclusions to its report, the com-In the conclusions to its report, the committee states that the men at the site were being paid in accordance with a freely negotiated National Agreement. Any recommendation which would be incompatible with that agreement could only have the most serious effects upon the agreement, the more especially because the Shell Centre site could not be considered in isolation. The committee feels that such agreements should be upheld, and that therefore Messrs. Wheeler's employees should not receive any extra payments should not receive any extra payments until and unless the agreement is altered to provide for such payments.

On the other hand, the committee recog-

when one set of workers, who cannot be put on a payment-by-results scheme, find themselves working alongside others who are earning extra money in this way. The fact that the standard wage rate for a journeyman electrician is higher than that of a building trade craftsman, and that the weekly pay packet is on the average higher in the electrical contracting industry than in the building industry does not higher in the electrical contracting industry than in the building industry, does not remove the problem. Nor does the fact that the problem is largely psychological make it any the less real.

The committee recommends that the N.J.I.C. should, as a matter of urgency, review Clause 8 of the National Agreement, with a view to its alteration so as to permit of extra payments in certain exceppermit of extra payments in certain excep-tional circumstances. The Committee does not accept that electricians should receive extra payments simply because building trade operatives are being paid extra money, nor that the amount of any extra payments which might exceptionally be authorised for electricians should be related to the amount of extra payments being made to building trade operatives on any particular site.

More Logical Approach

The committee thinks that a more logical approach to the alteration of Clause 8 should start from the fact that it has hitherto proved impossible to devise a payment-by-results scheme for the industry. Since that is so, the committee is of opinion that where electricians are working the state where a property of the hidding on sites where a majority of the building trade operatives are being paid under a payment-by-results scheme, on a measured work basis, and the tempo of the work (including that of electricians) is consequently increased, there is much to be said for electricians being given come extra pay. for electricians being given some extra pay-ment to offset, to some extent, the fact that no payment-by-results scheme is possible in

their case.

The amount of the extra payment should, it is suggested, be fixed by the N.J.I.C. and should be applicable to all sites where the requisite conditions are satisfied, thus minimising the difficulties of contractors in tendering for fixed-price contracts. The dering for fixed-price contracts. The amount of the extra payment should not

be such as to cause too much inequality

be such as to cause too much inequality between those electricians who happen to be employed on sites where the requisite conditions apply and those who do not. The Committee further recommends that, to meet future cases of disagreement in the N.J.I.C., an arbitration clause should be added to the industry's negotiating procedures.

Since Messrs. Wheeler's electricians can-Since Messrs. Wheeler's electricians cannot, in the Committee's view, be granted any extra payments until and unless the National Agreement is altered, it is recommended that they should return to work without delay, thus enabling the urgent discussions in the N.J.I.C. to take place in an atmosphere of goodwill on both sides.

MIDLANDS CONTRACTORS PLANT ENGINEERS' DINNER

A very successful first annual dinner and dance was held on Friday evening at the Chesford Grange Hotel, Kenilworth, by the Midlands branch of the Contractors Mechanical Plant Engineers, some 230

Mechanical Plant Engineers, some 230 members and guests being present.
Proposing the toast, "The Midlands Branch," Mr. Lawrence McCarthy, editor of The Contract Journal, said that since its formation in June of last year membership of the branch had grown to something like 130 which was no mean achievement. The branch had been formed during an impressive year for the construction industry. There had for example been the completion. There had for example been the completion and opening of the London-Birmingham Motorway—a scheme of which the con-struction industry could be justifiably proud. He sometimes wondered however whether the plant managers and mechanics who kept the great plant fleet operating received the credit that was due. Somehow,

Referring to the recent visit to Europe and America by Mr. Ernest Marples, Minister of Transport, Mr. McCarthy said that if the Minister had only made inquiries in the right quarters in this country he doubted year, much whether the quiries in the right quarters in this country he doubted very much whether the Minister's journey would have been necessary. He feared that the Ministry might become so obsessed with "pink zones" and other restrictions that they would forget to build the roads which were still so badly needed. It seemed to him the essence of bad planning that the London-Yorkshire Motorway should now he halted with no Motorway should now be halted with no chance of further construction being undertaken for some time.

The growth of the Contractors Mechanical Plant Engineers had been quite remark-able, he said. Wishing them well for the future he expressed the hope that they would not widen their membership to such an extent as to lose their identity.

C.M.P.E. Growth

Responding, Mr. R. Russell, chairman of the Executive Council, thanked Mr. McCarthy for the advice and assistance he had given the Association since its formation. Membership had grown from ten to nearly 500 in under four years and a national executive council had now been formed. A competition in which members were invited to submit a written paper on "The Application of Mechanical Plant to the Construction of Modern Roadways" was being promoted by the executive counwas being promoted by the executive coun-

The toast of "The Guests" was ably proposed by Mr. N. A. Soper, chairman of the Midland branch, Mr. P. Barratt, managing director, Saville (Tractors), Ltd.. responding.

The Duke of Edinburgh is to visit the Hounslow factory of Concrete, Ltd., on March 16.

Late Construction News

LAING MOTORWAY CONTRACT? ing to an unconfirmed report, John Laing and Son, Ltd., are to be awarded a contract and Son, Ltd., are to be awarded a contract for the construction of 28 miles of the Bristol-Birmingham Motorway, including 63 bridges of various spans in prestressed and reinforced concrete and in steel. Tenders were invited by Worcestershire C.C. (Contract Journal Oct. 22, 1959), St. PANCRAS HOUSING. — Subject to Ministry approval, St. Pancras B.C. are to award two large housing contracts to M. I. Gleeson (Contractors), Ltd. One

M. J. Gleeson (Contractors), Ltd. One is for the erection of 164 dwellings at Gospel Oak redevelopment (area 2) Lamble Street extension, and the other for 61 dwellings at Castle Road. The cost of the schemes is £459,204 and £136,966, respectively.

dwellings at Castle Road. The cost of the schemes is £459,204 and £136,966, respectively.

Steel Company's Expansion.—The Steel Company of Wales have announced that orders worth £4.6m. have been placed for carrying out their expansion programme. The main foundation work has been let to Sir Robert McAlpine and Son, Ltd., at a cost of £2.1m. W. S. Atkins and Partners, 158 Victoria Street, London, S.W.1, are the consulting engineers.

Liverpool. Offices.—H. Fairweather and Co., Ltd., Hyde Works, St. James's Lane, London, N.10, have been awarded the contract for erection of a new office block on the corner of Water Street and Drury Lane, Liverpool, for The Commercial Union Assurance Co., Ltd. The building is estimated to cost about £200,000/£300,000. Plans are by Daniel Watney, Eiloart, Inman and Nunn, The Charterhouse, Charterhouse Square, London, E.C.1, and quantities by G. D. Walford and Partners, 7 St. James's Street, London, S.W.1. The consultants are R. Travers Morgan and Partners, 60 Aldermanbury, London, E.C.2, and K. W. Dale and Partners, 9a Sackville Street, London, W.1. Granntham By-pass. The Minister of Transport has announced that work will start shortly on the construction of Grantham By-pass. The contract, as reported on Dec. 3 last, has been placed with Robert McGregor and Sons, Ltd., Manchester, whose tender was £1,856,009.

Manchester, whose tender was £1,856,009.

BIRMINGHAM-PRESTON MOTORWAY

Early next month tenders will be invited for several contracts in connection with the Birmingham-Preston Motorway.

with the Birmingham-Preston Motorway. As officially announced elsewhere in this issue, two Lancashire County Council contracts are involved—the construction of 11.30 miles of motorway from Woolston to Winstanley and 14.81 miles from Winstanley Park to Preston By-pass.

The third contract will be Contract Section A—Dunston to Whitgreave, for which bids will be invited by Staffordshire County Council. This involves seven miles of motorway and 0.7 miles of link road forming a by-pass of Stafford (the project is described in an article on page 723).

£748,000 GREAT NORTH ROAD CONTRACT

A contract valued at £748,000 has been placed with George Wimpey and Co., Ltd., for the construction of a second carriage-way on the Great North Road between Redhouse and Wentbridge.

MARTIN COWLEY'S PARTY

Following their establishment last year of a London office, a champagne party was held recently by Martin Cowley, Ltd., at which executives from the company's northern and southern divisions were morthern and southern divisions were present. Guests, who included a number of people professionally concerned with civil engineering contracting, were welcomed by Mr. Martin Cowley, chairman and managing director.

18-STOREY STUDENTS' BLOCK AT FINSBURY

L.C.C. Approve £1m. Project

THE largest hall of residence for 1 students to be erected in this country is planned on a 2½-acre site at the junction of Bunhill Row and Chiswell Street, Finsbury, London,

At their meeting recently the L.C.C. Education Committee approved a scheme for the development of the site by the erection of an 18-storey block for 500 students of North-ampton College of Advanced Technology and a new technical college.

The floors of the residential block will be divided into flats.

be divided into flats, each accommodating 12 students, with its own entrance door, utility room, bathroom, shower, etc. The roof will have grassed and paved areas for students and a flat for the warden. Other staff will live on the seventh floor.

The site will be paved and enclosed on two sides by the new college. The hostel will be built within this square and raised on columns so that no 12 students, with its

within this square and raised on columns so that no study bedrooms are overlooked and a clear space is left at ground level. Students will use bridges to cross the square and move between the college buildings. The principal rooms in both the hostel and college the hostel and college

are planned at the level of the bridges.

In this way the circulation of students and the public are

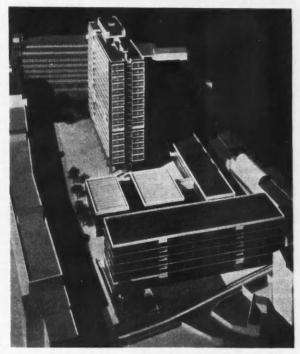
cuiation of students and the public are entirely separated.

The college is organised into departments in the plan, which include courses for dispensing opticians and engineers. A second block has two gymnasia, built one above the other, an assembly hall equipped for teaching the control of above the other, an assembly hall equipped for teaching drama and a youth employment bureau. Overlooking the whole length of the west side of the square a two-storey block will provide separate dining rooms for the college and the hall of residence.

A proposal that instruments for record-

ing stresses and pressure-distribution should be incorporated into the foundations and sub-soil of the building, to enable students taking civil and structural engineering courses to record observations as part of their training, is at present under consideration. The results of their work are expected to make an important contribution to existing knowledge of soil contribution to existing knowledge of soil mechanics under high buildings.

The estimated cost of the hall of resi-



Model of the hall of residence and new technical college

dence is £591,785, and of the technical college £422,370. Furniture and equipment for the hall of residence will cost about £57,000 and for the technical college £48,000. Technical equipment for the college will cost a further £20,000.

The designers of the scheme are: Architect to the Council, Hubert Bennett, F.R.I.B.A.; deputy architect, F. G. West, A.R.I.B.A.; schools architect, Michael Powers, B.A.(Cantab.), A.R.I.B.A., B.A.Dipl.; assistant schools architect, G. F. Horsfall, M.B.E., B.Arch., A.R.I.B.A., and group leader, P. K. Nicoll, A.R.I.B.A.

NATIONAL CONTRACTORS **GROUP**

J.C.C. Looks at its Activities

REPRESENTATIVES of the National Contractors Group of the London Master Builders Association recently attended a meeting of the Joint Consultative Committee of Architects, Surveyors and Builders to give details of the Group's activities. The J.C.C. had felt that it would be in the interests of all concerned that these activities chould be made completely clear. should be made completely clear.

The J.C.C. was told that the Group was established some two years ago as part of the general reorganisation of the L.M.B.A. and is a section of that Association. It concerned itself in particular with the interests and problems common to national contractors who, as opposed to those contractors who, as opposed to those operating in a particular locality, carried out contracts throughout the United Kingdom and abroad.

dom and abroad.

The main reason behind the formation of the Group was to encourage the larger contractor to take a greater interest in the affairs of the L.M.B.A. and in the National Federation of Building Trades Employers. In the past, although they had been subscribing members, not all of them had been active and it was felt that if they were brought together in their own group where they could deal with the many matters common to the larger firms then this interest would be stimulated. then this interest would be stimulated. This had in fact proved to be the case.

Tackling Contract Problems

It was clearly one of the functions of the Group to safeguard the interests of member firms against the imposition of unfair contract conditions, and to see that the member firms were fully aware of the legal implications of any alterations or ad-ditions that might be made to the Standard legal implications of any alterations or additions that might be made to the Standard Form of Contract or tendering procedure. In this they were not breaking fresh ground but merely following the course of action which had been taken by the L.M.B.A. and indeed by all regions of the N.F.B.T.E. for many years. It was the permanent staff of the Group and the L.M.B.A. who dealt with such contract matters and where necessary with any other region which might be involved. In all cases these matters were in the first all cases these matters were in the first instance taken up with the architects and quantity surveyors concerned and this usually resulted in a satisfactory adjustment and, therefore, no further action was necessary. necessary.

In the few cases where agreement could and the few cases where agreement could not be reached, members were advised to qualify their tender and a draft qualification was issued to them by the L.M.B.A. It was emphasised that the foregoing steps It was emphasised that the foregoing steps were only necessary when the architect or quantity surveyor proposed departures from the agreed conditions of contract or the tendering procedure recognised within the industry. When the agreed and recognised practices were followed, obviously no reports were made by members and no action by the Group was necessary.

Other Activities

This was, however, only a small part of the Group's activities; since their formation they had been very active in the encouragement of apprenticeship, education and training, accident prevention, technical information, labour relations and research. By bringing the larger contractors together it was hoped that many problems which had affected tendering and contract procedure would be solved to the benefit of the industry as a whole.

QATAR CONTRACT

A contract has recently been obtained by Semtex, Ltd., to instal 1,800 sq. yd, of Vinylex tiles in the palace of the Ruler of Qatar on the Persian Gulf.

INSTITUTION OF STRUCTURAL ENGINEERS

The following candidates were elected to membership of the Institution of Structural Engineers on January 28, 1960:

Students
J. Breebaart, 1092 Pretorius Street, Hatfield, Pretoria, South Africa; P. Clements, 13 Birchdale Road, Hengrove, Bristol. 4; J. Exton, Hilts Cottage, Crich, near Matlock; J. P. Grafton, 47 Market Street, Brighton, 1; S. P. Gupta, 24b Mohini Mohon Road, Calcutta, 20, India; B. Hull, Embden Street Post Office, Manchester, 15; D. Kralling, 181b Hampton Road, Twickenham, Middx.; D. A. Morton, 277 Trichardt Road, Parkdene, Boksburg, South Africa; Ng Sai-wah, 18 Gordon Avenue, Holmcroft, Stafford; O. R. Ogundehin, 41 Osholake Street, Ebute Metta, Lagos, Nigeria; S. S. Patel, At and Post Langhnaj, Dist. Mehsana, via Ambliyasan, North Gujarat, India; C. Pritchard, 18 East Liberty, Greetwell Road, Lincoln.

Graduates
M. J. Ballentyne, C/o Orient Lane, G.P.O. Box 545, Sydney, New South Wales; R. Bishop, 20 Pettits Lane, Romford; A. K. Chaudhuri, 8 Burnbank Terrace, Top Floor, Glasgow, N.W.; H. B. M. Eid, Department of Building, Technical Institute, Khartoum, Sudan; A. I. Hussain, 77 Wyatt Park Road, Streatham Hill. London, S.W.2; D. C. Hynd, 41 Windmillhill Street, Motherwell; J. W. Jones, 31 Old Park View. Enfield; T. Kao Wu, 1 Lau Sin Street, 3rd Floor, Hong Kong; S. A. Osobamiro, 13 Belvedere Road, Darlington; A. Pountney, 8 Park Lane West, Tipton; R. N. Price, 11 Summers Avenue, Bootle, 20: P. Quigley, 6 Portland Road, Longsight, Manchester, 13: R. Wayment, 38 Warland Road, Plumstead, London, S.E.18; B. R. Wilde, The Bungalow, Ashton Road, Golborne, near Warrington.

Member C. T. A. Byers, 83 Elwill Way, Beckenham.

In Parliament

MR. MARPLES QUESTIONED ABOUT HIS VISITS TO THE CONTINENT AND U.S.

FOLLOWING his recent visits to the Continent and the United States, the Minister of Transport was asked by Mr. J. Grimond, in the House last week, what progress he had made in his study of bridge-building methods, and whether he would make a statement on the methods to be employed on

on the methods to be employed on future road development.

Replying, Mr. Ernest Marples said that his visit to the Continent had been primarily to see for himself the methods being adopted n Europe to utilise the latest techniques of bridge design and construction. The visit had satisfied him that British design and construction matched work being done elsewhere.

It might not therefore be necessary to

It might not therefore be necessary to It might not therefore be necessary to make radical changes in present arrangements, he added, but to ensure that full advantage was taken of the latest ideas and techniques he was continuing to study whether it was desirable to try out new arrangements experimentally. In any case, he intended that the partnership between the Ministry, bridge designers and bridge builders should be made as close as possible.

builders should be made as close as possible.

Mr. Marples said that in the United States he had examined in several cities the methods being adopted to improve traffic flow and road safety. There were many new ideas which were now being examined.

Mr. Grimond: Can the Minister hold out any hope of making economies in road or bridge building? Secondly, has he studied the system of toll charges which operates in America?

Mr. Marples: on the first part of the

in America?

Mr. Marples: on the first part of the hon. Member's supplementary question, it is difficult to compare costs in foreign countries with those in this country, because of the many variables, such as the rate of exchange, but we may be able to make slight economies. More than anything else, we might be able to add to the amenities. As for the second part of the supplementary question, toll roads in America are now being abandoned. They were successful largely because they were long roads in congested areas, with limited points of access. Since this country is points of access. Since this country is so much smaller there are more points of access. At places like bridges and tunnels tolls seem to be suitable all the world over, but opinion in America is against the provision of further main toll roads.

Mr. Grimond: Can we take it that toll

roads are out?

Mr. Marples: No. I was giving the

Mr. Marpies: No. 1 was giving the American experience.
Colonel Beamish: Did my right hon.
Friend observe the excellent lane discipline that exists in the United States, and contrast it with the lack of discipline in this country? Has he any legislation in mind, or any alterations to the law, which might improve lane discipline in this country

Mr. Marples: Lane discipline in America is better than it is here, but that is is better than it is here, but that is largely because American roads are marked accordingly. In the early days of the M.1 it was an appalling spectacle to see drivers going all over the road, but the latest reports show that lane discipline is being gradually assimilated by the drivers, and that they are beginning to observe the lane rules.

London-Yorkshire Motorway

The Parliamentary Secretary to the Ministry of Transport, Mr. John Hay, informed Mr. F. Noel-Baker that the first 73 miles of the London-Birmingham Motorway had cost about £395,000 per mile. Until the detailed design of the northern section was completed, it was not possible to give an accurate estimate of its cost,

but preliminary investigations suggested that the cost was likely to be of the order of £425,000 per mile, so that the cost per mile of the completed motorway would be about £418,000 per mile. The total length about £418,000 per mile. The total length would be about 160 miles and the total

Type Tunnel

Mr. Fernyhough asked if, in view of the number of unemployed in Jarrow and Heb-burn, the Minister would give permission for work to start immediately on the ap-proach roads to the proposed Tyne Tunnel. Replied Mr. Hay: We are informed by the highway authorities concerned that work on the tunnel approach roads cannot

work on the tunnel approach roads cannot be started until they have obtained fresh Parliamentary powers for the construction of the tunnel and the approach roads in accordance with their new plans. As the House will know, the councils have now deposited the necessary Bill.

London-Exeter Road

Questioned by Mr. Wingfield Digby, the arliamentary Secretary said that future Parliamentary Parliamentary Secretary said that future plans provided for very significant increases in the length of dual carriageways to be finished on the London-Exeter Road. The first to be finished would be 1½ miles between Moorhill and Hatch in Hampshire, and 2½miles of the Staines By-pass to be completed at the end of 1961. There would be more sections of dual carriageway as "we go ahead." we go ahead.'

Roads, London-Bournemouth

Roads, London-Bournemouth

Replying to Captain Pilkington, the Parliamentary Secretary said that, apart from Staines By-pass which was now under construction, the Ministry planned to spend £100,000 in 1960 on the construction of 1¼ miles of dual carriageway on A.30 in Hampshire, and £24,000 on the improvement of the junction of A.30 with A.325. Considerable lengths of carriageway in Surrey would be widened from 30ft way in Surrey would be widened from 30ft, to 33ft, in the course of resurfacing.

Accidents

In a written answer, Mr. Marples pointed In a written answer, Mr. Marples pointed out to Mr. Proctor that the safety of workers on schemes like the Barton Bridge was covered by the Factories Acts, which were administered by the Minister of Labour. The present arrangements for contracting and sub-contracting on these projects were governed by the relevant clauses in the Institution of Civil Engineers' Standard Conditions of Contract and he had heard no suggestion that they were had heard no suggestion that they were unsatisfactory in this respect. He did not consider, therefore, that there was any occasion to set up a committee to consider what administrative changes were necessary in the road and bridge construction pro-gramme at present in operation.

Public Works Loan Board

Mr. Sydney Irving asked the Chancellor of the Exchequer if he would arrange for the balance of the Public Works Loan Board's outstanding debt to be used as the nucleus of the capital from which the the nucleus of the capital from which the Board could continuously re-lend while at the same time allowing the Board greater freedom in its lending policy.

Mr. Amory: No, Sir. I do not consider that a change is called for in the present policy governing lending by the Public Works Loan Board.

Mr. Eviptor, Is the right here Continued.

Works Loan Board.

Mr. Irving: Is the right hon. Gentleman aware that it is increasingly urgent to help efficient local authorities who should have greater access to funds at rates of interest more in keeping with the needs of the services they have to undertake? Will he find means to provide greater exhaliting for find means to provide greater stability for local government finance, so that they can

get away from the tremendous amount of short-term debt being built up which is worrying them a great deal? Mr Amory: In regard to the first part of

that supplementary question, I do not think the course suggested would be a good one. It would lead to the kind of distortion we knew twelve or thirteen years ago.

"ALL-IN" SERVICE

To the Editor of "The Contract Journal."

Sir,—Having just returned from three weeks' rather unsuccessful fishing vacation, I find, on my office desk, John Sumner's reactions to my few ideas on "all-in"

reactions to my few ideas on "all-in" service which you published on December 10. Well that's fishing, I suppose.

And now I just haven't time to get John Sumner out of his deep water. I'm too busy providing the traditional architect services for the many customers who still prefer to buy those services direct, rather than through a builder, suspicious types who appreciate the probabilities of being taken for a ride when they have no knowledgeable representative in dealing with the other party to the contract, the builder. other party to the contract, the builder. For, if the builder pays the architect he

will surely at least influence the tune.

I'd enjoy nothing better than exchanging arguments at 10,000 miles with John Sumner but time won't permit, because my clients not only insist on their architect preparing their plans under their instruc-tions, but they also insist on his calling competitive tenders, because they are un-generous enough to suspect that the "all-in" operator might make a "mistake "in his estimating and that the mistake might be on the high side. Then they also insist on the architect supervising the building work and checking costs of variations, etc., they won't even trust the builder in these small matters. They evidently think that his financial interest in the contract might lead him into being a little unfair over so lead him into being a little unfair over so many matters, materials, workmanship, and costing. They don't seem to think that they can check all these things themselves, so they have their architect do it. Of course there is the odd occasion when, to save the month or two required for preparation of quantities and calling tenders, the building owner decides to give his job to a builder, but the suspicious type still to a builder, but the suspicious type still employs his architect direct, and the architect is just as busy, and even more useful, in this type of contract.

And so I must withdraw from the debate through pressure of straight architectural business, leaving the last word to John

Yours etc.,

ALAN E. STAFFORD, F.R.A.I.A., F.A.P.I.

North Sydney,

GRANULATORS IN PRODUCTION OF ROAD AGGREGATES

It is the performance of the granulator or final-stage crusher that determines the grading and shape of the final products from a plant preparing road aggregates. Road Research Technical Paper No. 44* summarizes the results of an extensive study of ten granulators covering the four main types, jaw, cone, impact and rolls, when used on twelve different types of

Each machine was studied over the whole practicable range of operating conditions, the object of the work being to compile a large mass of information for the guidance of both manufacturers and users of granulators. The report should help producers of road aggregates to use their granulators of the best advantage in meeting the flucto the best advantage in meeting the fluc-tuating demands for the different sizes of aggregate and at the same time supplying each size asked for within the specification

*Road Research Technical Paper No. 44. Published for D.S.I.R. by H.M.S.O., price 5s. 6d. (99 cents U.S.A.), by post 5s. 10d.

JUNE START ON STAFFORD BY-PASS

Tenders to be Invited Next Month

A START will be made in June on the A construction of the first section of the 26 miles of the Birmingham-Preston

Motorway, from Dunston, Staffs., to the Cheshire boundary near Barthomley.
The Minister of Transport has authorised Staffordshire County Council to notify contractors of the intention to advertise early in March for tenders for this section, which comprises the whole of the Stafford

early in March for tenders for this section, which comprises the whole of the Stafford By-pass including the link road from the Eccleshall Road junction to the Stafford-Newcastle Trunk Road.

The new road will be to motorway standards, having an effective width of 118ft., with two 36ft. three-lane carriageways and a 13ft. wide central reservation. The length comprising the Stafford By-pass will be about six miles.

The length comprising the Stafford By-pass will be about six miles.

After leaving the southern junction with the Stafford-Wolverhampton Road at Dunston, it crosses Ashflats Lane where a four-span accommodation road bridge is located to deal with the farm road, and a two-span bridge to carry Ashflats Lane over the motorway. Barnbank Lane, farther north, is carried over the motorway with a similar two-span bridge.

farther north, is carried over the motorway with a similar two-span bridge.

A 144ft, single-span footbridge caters for Burton Bank Lane, which will be closed to vehicular traffic, and a single-span underbridge near the B.R.C. sports club deals with Burton Manor Road. Thorney-fields Lane is carried over the motorway, while the Stafford-Newport Road is taken under the motorway some 600vd west of under the motorway some 600yd, west of the Castle. Various small under-bridges deal with the footpaths and accommoda-tion roads between the Castle and Aston Bank, while the motorway is carried over the Stafford-Shrewsbury Railway Line by a single-span bridge. single-span bridge.

In order to get reasonable gradients and alignments on the present roads it has been necessary to divert Aston Bank and the Seighford Road, the new route being carried by a new bridge over the motor

way, so obviating the present poor align ment of Aston Bank west of Doxey Bridge and the two right-angled bends on the Seighford Road. The line joins up with the present Creswell Viaduct scheme and has a major motorway junction with the Stafford-Eccleshall Road. Provision is made at this junction for a dual carriageway link road to the Stafford-Newcastle way link road to the Stafford-Newcastle
Trunk Road, A.34, where a roundabout
will be situated approximately at the
Stafford Borough Boundary.

In order to provide the necessary
balance of the earthworks the opportunity
will be taken to continue the work porth-

will be taken to continue the work north-wards so that it will ultimately link up with the continuation of the motorway through to the Cheshire boundary.

The scheme will require the movement of about 1,795,000 tons of earthwork, 45,000yd. of drainage with pipes to a maximum size of 48in., the laying of 170,000 tons of road foundations and 454,000 sq. yd. of finished road surface. In total there will be eight bridges over the motorway, and 18 bridges under the motorway, and 18 bridges under the motorway to deal with roads, footpaths, railways and rivers. In addition, it is intended to provide a service area near the crossing with Aston Bank, but the ultimate detailed development of this site has not been as yet decided by the Minister.

Considerable care has been taken in designing the road to ensure that when

Considerable care has been taken in designing the road to ensure that when constructed it will marry in with the countryside and planting and other amenity treatment will make the route as attractive as possible both for the travelling public and the residents in the area.

The County Council have been appointed the Minister's agents for the work and the whole of the undertaking has been designed and will be supervised by the county surveyor, Mr. F. Jepson, and his staff.

NUCLEAR POWER STATION FOR SUFFOLK

THE Central Electricity Generating Board have been informed that the Minister of Power has decided to give his consent to the building of a nuclear power station at Sizewell,

Tenders are being sought forthwith from the consortia of companies engaged in nuclear power station construction work, and preparatory work will be carried out on local access road improvement.

on local access road improvement.

Having a planned output of 650,000-kW, the project will be larger than any of the four stations now being constructed by the Central Electricity Generating Board, but the board are seeking consent for a 1,000,000-kW station at Oldbury, Gloucestershire. Consent has also been received for a 500,000-kW station at Dungeness, for which tenders will be considered in April. This contract is expected to be placed by midsummer.

LINK ROAD ESTIMATED TO COST OVER £400,000

At a cost of over £400,000, a trunk road is to be constructed to link Gillingham, Kent, with the M.2—the planned motorway between London and the Channel ports. It will be built at the same time as the motorway which will by-pass the traffic bottleneck of the Medway towns.

An Order formally establishing the line of the 2½-mile road will be published soon.

BOSTON HOSPITAL ARCHITECTURAL COMPETITION

The Ministry of Health has announced that Sheffield Hospital Board will shortly invite architects to participate in an open competition, approved by the Royal Institute of British Architects, for designs for a new 470-bed hospital at Boston, Lincolnshire.

HOLLOWAYS TO BUILD MULTI-STOREY EDINBURGH OFFICE BLOCK

CONTRACT for the foundations and superstructure of the new head office building in Edinburgh of the Scottish Widows' Fund and Life Assurance Society has been awarded to Holloways Scottish Constructions, Ltd. The building will comprise basement and seven floors, giving a total floor area of about 65,000 super. ft. Ground floor and basement are to be 100ft. by 120ft. on plan and will provide accommodation for cars, records, offices and public areas. The upper floors of two wings, approximately

Model of the proposed offices

120ft. by 44ft. and 56ft. by 44ft. on plan are to be private offices; and the top floor is for the caretaker's flat, canteen, plant rooms and open roof areas.

rooms and open roof areas.

The site is in a prominent position in Edinburgh on the west side of St. Andrew Square, surrounded on three sides by public roads and adjoined on the other by an existing building. Access will be limited and space very tight; and the whole operation will require careful planning. It is anticipated that construction work will commence on March 1, 1960, and the building is scheduled for completion by June, 1962.

Basil Spence and Partners, Edinburgh and London, are the architects. Consultants include: Structural engineers—Blyth and Blyth; quantity surveyors—J. D. Gibson and Simpson; mechanical engineers—A. F. Myers and Partners; electrical engineers—Mitchell, Dey and Lackie.

MEASURING TAPE EXHIBITION

An exhibition, entitled The Making of a Measuring Tape, was presented in London last week by A. West and Partners, Ltd., with the co-operation of James Chesterman and Co., Ltd., Sheffield, who have been manufacturing measuring tapes for more than a hundred years.

The exhibition included photographs and component parts of a measuring tape

The exhibition included photographs and component parts of a measuring tape in progressive stages of manufacture up to the finished product. There were also examples of various measurements used in different countries, together with a museum collection of tapes made in the nineteenth century, and many items of modern and specialist measuring tapes.

"VINTAGE YEAR FOR FIRES"

Research into Problem of Fire Spread

FIRE brigades are estimated to have

TIRE brigades are estimated to have attended over 200,000 fires during 1959, nearly twice the normal number in a year, said Mr. D. I. Lawson, director of the Fire Research Station, in a recent address to the Insurance Institute of London. Fire losses during 1959, which Mr. Lawson described as a "vintage year for fires," totalled £44m., a new all-time record, exceeding the previous record in 1955 by nearly £17m. Mr. Lawson said it was suspected that the dry summer led to an increased number of outbreaks inside buildings as well as outside. "If it were possible to relate the number of outbreaks of building fires to the climate prevailing at the time, then from the weather forecast it should be possible to broadcast a warning to the public when a time of extreme fire danger was approaching. As these warnings would be for a limited duration, it should be possible to secure the public co-operation more effectively than is the case with fire propagands at present. With this in mind, a survey will be made during the coming year on the incidence of fires in various parts of the country in 1959 in relation to the weather conditions prevailing at the time of or just prior to the fire."

Fire Spread

"While it is important to reduce as far as possible the causes of fire it is also very important to ensure that fires shall not spread rapidly throughout a building," he stated. "Experiments with fires in rooms indicate that the wall linings have a large effect on fire spread. This has led to a large number of tests being carried out on wall lining materials. The results of these tests have been published recently by the Stationery Office in a booklet, 'Flameretardant Building Materials.' "Quite recently a number of serious fires

"Quite recently a number of serious fires in factories has focussed attention on the problem of fire spread in industrial buildproblem of fire spread in industrial buildings. These together with the provisions of the Factories Thermal Insulation Bill have led to an experimental programme to determine the contribution of wall linings in large buildings. Clearly it is not possible to carry out experiments on full-scale and it is necessary therefore to inquire how far model techniques may be used in studying fires of this size. It appears that a fire has three stages. During the first stage the fire is increasing in area and the rapidity of growth will affect the safety of life and

also the property destroyed before the brigade arrives. The duration of this stage is governed by the amount and nature of fuel and the amount of air entering the lding. The temperature inside the building. The temperature inside the building rises steadily during the first stage and then levels off as the second stage commences. During the second stage the fire burns steadily for a time, depending on the rate at which air enters the building and the amount of fuel present. It is now known that the rate of burning is roughly proportional to the supply of air to the fire and also how this is controlled by the dimensions of the windows. The duration of the second period is therefore propor-tional to the total fire load and inversely tional to the total fire load and inversely proportional to the rate of supply of air. In this second period the time for saving life and stored goods is past and it is during the period that the structure receives its greatest punishment. The last period is one in which the temperature of the building falls and the fire cools as the combustible contents become exhausted. "From experiments using models we are beginning to learn how great a part window openings and quantity of fuel play in determining fire conditions and before long it should be possible to design structures

determining fire conditions and before long it should be possible to design structures in relation to the fire conditions that are likely to occur in their use. This is such an encouraging field of research that other countries—U.S.A., Canada, Italy, Holland and Germany—have agreed to join us in a co-operative effort to understand how building design influences fire severity.

"From this work it will be possible also to say how much heat is radiated from building fires and this in turn will give a definite

"From this work it will be possible also to say how much heat is radiated from building fires and this in turn will give a definite indication as to how far buildings should be separated. In fact, experiments of this kind have already enabled recommendations to be made for the Scottish Building Regulations. Measurements on model scale are also being made of the heat transfer from flames to floors above the one already ignited to obtain information about the fire spread from floor to floor over the outside of a building.

"Side-by-side with these model experiments, investigations are being made of the fire spread from storey to storey in full-scale buildings. These large experiments are relatively costly and so the opportunity is taken to repeat each one at one-third scale to increase our knowledge of model fires.

"Very little is known at present about the effect of wind on fire spread. In carrying out experiments in the open,

results are often affected by the wind and it has been necessary to choose days judiciously in order to get representative results. It is now possible to carry out fire experiments inside the new Models Laboratory, the roof of which will open over a section 36ft. x 40ft. to allow the escape of smoke and hot gases. This year a fan installation has been installed by means of which air can be sucked across the laboratory. In this way wind speeds of up to 30-m.p.h. can be developed across a section 15ft. x 15ft. by 10ft. high."

Performance of Structures in Fire

"Modern buildings are constructed so that if a fire occurs in one part it is conthat if a fire occurs in one part it is confined to the compartment in which it starts. This means that walls, partitions, columns and floors must be subjected to the conditions of a fire and their performance examined. Prestressed concrete constructions have grown in importance in recent years and a research programme has shown how this new material may be used safely in buildings. Perhaps the best illustration of our confidence in the results we have obtained is that it has been used for our own Models Laboratory in which we carry out quite large fire experiments.

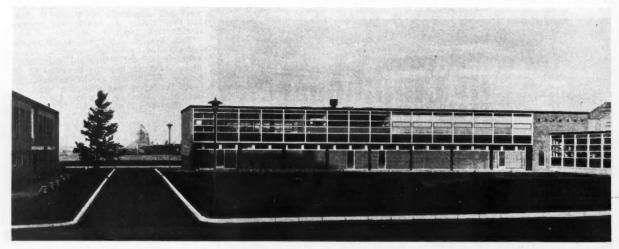
out quite large fire experiments.

"We are currently engaged on a programme of work on the fire resistance of hollow bricks as these would effect considerable economy in buildings if they were generally adopted. Similar programmes

siderable economy in buildings it they were generally adopted. Similar programmes have been carried out on dense and lightweight concrete block walls.

"Quite apart from this work, over the last 10 years we have carried out sponsored fire resistance tests for industry. The firms concerned in the large majority of cases have agreed to make the results generally available and within the next few months a book should be available detailing the constructions tested and giving the fire-resistance ratings obtained.

"The classification of roofs has proved an embarrassment in this country for many years. A roof is required among other things to prevent the entry of fire into a building. Clearly it must not spread flame over its surface rapidly or it will become a hazard to other buildings. This has been met in the past by calling for incombustible constructions, though some exceptions to met in the past by calling for incombustible constructions, though some exceptions to this have been allowed. By subjecting a large number of different roof constructions to the radiated heat which might be experienced if a neighbouring building were on fire, it has been possible to devise a roof test, a description of which will be found in B.S. 476, Part 3. In this way it is now possible to provide a rational system of grading roof constructions both according to the hazard of penetration and of spreading fire across the exterior surfaces.



Pictured here are the new apprentice training workshop and dining and recreation rooms recently opened at the Workington Iron and Steel Company. The single-storey workshop block comprises a general workshop, electrical section and a welding shop, and the dining and recreation block contains four management and staff dining rooms on the first floor, served from a centrally situated kitchen. Linking the two blocks is a squash court with gallery and changing room. The main contractors for the buildings were John Twiname, Ltd., and the architects were Johnston and Wright, Carlisle

BUILDING RESEARCH STATION DIGEST No. 130

Supersulphate Cement

IT has been possible for a long time to import supersulphate cement from the Continent, and many important civil engineering and building works have made use of supersulphate in particular because cement concrete, in particular because of its good resistance to chemical attack. British brands of supersulphate attack. cement are now becoming available, and since it differs in many important respects from other cements this Digest has been prepared to give guidance to

the user.

Supersulphate cement is made from a mixture of 80-87 per cent. of granulated blast-furnace slag and 10-15 per cent. of calcium sulphate, to which is added up to 5 per cent. of Portland cement or cement clinker. The slag must be well granulated, of a glassy structure, and suitable in 5 per cent. of Portland cement or cement clinker. The slag must be well granulated, of a glassy structure, and suitable in chemical composition. The ingredients are ground, together or separately, more finely than for ordinary or rapid-hardening Portland cement. By suitable choice of slag and fineness of grinding, supersulphate cements of high early strength can be made and are allowed for in the Continental specifications (British slags are not in general suitable for these, but they do give cements with early strength similar to that of ordinary Portland cement at normal temperature).

At present there is no British Standard for supersulphate cement, but some of the

for supersulphate cement, but some of the tests of B.S.12 (for Portland cement) are applicable. Both British and foreign supplies will normally pass the requirements of B.S.12 for setting time, soundness, and compressive strength of vibrated mortar cubes or standard concrete.

Table 1

Range of strength values obtained on 4in. cubes, water-stored, with a $1:1\frac{1}{2}:3$ mix of supersulphate cement concrete, w/c 0.50.

Age	Compressive
in	strength
day	lb./sq. in.
3	1,750-3,000
7	3,000-5,000
28	5,250-6,000
90	7,500-8,000

The bulk density of supersulphate cement, however, may be only 70lb. per cubic foot, as compared with 85-90lb. usually assumed for Portland cements, and this must be allowed for in converting mixes from weight to volume proportions.

The shrinkage is about the same as that of other cements used for structural

purposes.

Supersulphate Cement Concrete

Concrete is mixed and placed in exactly the same way as with other cements, but supersulphate cement must not be mixed with any other type of cement, nor must lime be added to it. As with other cements, the strength of the concrete depends on the water:cement ratio, decreasing as this ratio increases. Strength and workability are adversely affected if too much sand is used in the mix, more so than would be the case with Portland cement. Supersulphate cement is also cement. Supersulphate cement is also more sensitive to the quality of sand than Portland cement, and dirty sands or aggregates with a high content of organic

aggregates with a high content of organic matter must be avoided. Clean water of drinking quality should be used for mixing. Supersulphate cement will give a more workable mix than most Portland cements for the same water:cement ratio. A typical mix would be 1:1½:3 by weight, with a water:cement ratio of 0.50. This is somewhat richer than a typical mix with Portland cement. It must be remembered, however, that supersulphate cement will be used principally for its resistance to

chemical attack, and for this purpose the cement content of concrete must be adequate. Table I shows the range of strengths obtained with different brands.

These values are for normal ambient temperatures. In cold weather the develop-ment of strength is delayed more than with most Portland cements, but the ultimate

strength is unaffected.

At tropical temperatures the strength of supersulphate cement concrete is greater than in normal conditions, but precautions must be taken against drying out. These for hydration than the Portland type, and therefore evaporation during the curing period must be prevented.

period must be prevented.

Up to a certain point, still higher temperatures of curing give higher strengths. Maximum strengths are obtained at about 45-50 deg. C. (160-170 deg. F.); at temperatures higher than this the resulting strengths will be lower. It is not advisable to undertake steam curing unless the strengths obtained from the concrete mix have been checked over a period of time using the materials and the conditions of steaming it is proposed to use.

For early setting and hardening, super-sulphate cement depends on the small amount of Portland cement it contains. After prolonged storage, or storage in damp conditions, this Portland cement may deteriorate and the supersulphate cement will then give lower strengths, particularly at early ages. Good conditions of storage and transport are therefore essential.

Supersulphate cement concrete requires careful curing. Work should be kept moist with curing membranes, or should be sprayed and covered with damp sacks, for at least three days.

at least three days.

Surfaces exposed to the air will form a soft skin, but this is only a small fraction of an inch thick, and the effect is not progressive. Once the skin has worn off, if the concrete has been properly prepared, the surface will be hard and impervious. Supersulphate cement concrete can be bonded to matter. Portland generate and

Supersulphate cement concrete can be bonded to mature Portland concrete, and vice versa, without fear of interaction.

During the early life of reinforced concrete made with supersulphate cement there is a slight corrosion of mild-steel reinforcing bars; this is not progressive and is of no significance if the concrete is well made and if there is adequate cover to the steel (at least 1½in.). Prestressed units have been successfully manufactured.

There are some difficulties in measuring the heat of hydration of supersulphate cement by the B.S. method. It has, however, been measured by other means, and

ever, been measured by other means, and has the approximate values of 40.45 calories per gramme at 28 days. Such a low value is advantageous in mass concrete work in avoiding stresses set up by internal

Resistance to Chemical Attack

Resistance to Chemical Attack
Supersulphate cement is much more
resistant to sulphate attack than is Portland cement, and is generally better in this
respect than sulphate-resisting Portland
cements. As with all cements, however,
resistance to aggressive agents will be
obtained only if care is taken to obtain
good dense and impermeable concrete.

Magnesium and ammonium sulphates
attack supersulphate cement more rapidly
than other sulphates, especially in the
more concentrated solutions. However,
the resistance to seawater, which contains
magnesium salts, is very high. The soil
comditions under which supersulphate
cement is preferred are classified in Digest
31.

oement is preferred are classified in 231.

With high-quality concrete, a good resistance against weak organic and inorganic acids (of pH value down to about 3.5) is obtained. This makes it particularly

suitable for sewers carrying certain trade effluents, and gives some protection against the action of sulphate-reducing bacteria.

bacteria.

Supersulphate cement concrete has been used successfully for tanks and floors that need to resist attack by linseed and other vegetable oils. It also resists attack by sugars and phenols. For such special uses the advice of the makers should be obtained. The wearing properties of floors are improved by trowelling in neat cement before the concrete has set, a practice that must not be adopted with Portland cement. Supersulphate cement mortar may be

supersulphate cement mortar may be used for jointing chemically resistant brickwork or floor tiling. The mix should be 1:2 or 1:2½. It may also be used as a rendering, and may be applied by the cement gun. In such applications care is needed in curing to minimise the formation of a soft skin.

of a soft skin.

It is more expensive than sulphateresisting Portland cement, which will be
found adequate for the less severe conditions. Some guidance on the choice of
cements for various situations can be
obtained from Digests 31 and 74 and from
Water Pollution Quarterly Note No. 6.

CRACKING OF ASBESTOS-CEMENT SHEETS

THE properties of asbestos-cement and its behaviour on weathering are now well known. Methods of fixing the material have been devised to take account of these properties, and experience has shown that, when properly fixed, it is capable of giving satisfactory service with little risk of premature failure by cracking. During the past year or so, however, there have occurred a few instances of asbestos-cement, whether privated extremely exempted. have occurred a few instances of asbestoscement sheets, painted externally, warping and cracking within a very short time of fixing (four months in one instance). These failures were not confined to one particular form of sheeting or position in the building; they have occurred both with corrugated sheets used for roofing and with fluted sheets used for vertical cladding. Moreover, there was no evidence to suggest that unsuitable fixing methods, or undue movement of the frame to which the sheets were fixed, had been responsible for the trouble. for the trouble.

the sheets were fixed, had been responsible for the trouble.

Examination of samples of defective sheets has shown that considerable carbonisation of the unpainted surfaces had taken place, whereas the painted external faces were unaffected. Carbonation (the action of moist carbon dioxide on the cement) is itself not a serious change, but it is accompanied by an irreversible shrinkage. It is this shrinkage of the side of the sheet not protected by the paint that seems to be the main cause of the failures. Warping of the sheets is usually the first indication of differential shrinkage, but eventually the stresses set up may lead to cracking. How much shrinkage can occur without causing warping or cracking depends largely on the rigidity of the fixings.

It follows that this type of failure can be avoided by painting the back surface as well as the front, to prevent carbonation. The normal fixing practice to allow some freedom of movement should still be followed, however. The results of site trials along these lines support the above diagnosis and remedial measures.

Back-priming is, in any event, recommended for painted asbestos-cement

diagnosis and remedial measures.

Back-priming is, in any event, recommended for painted asbestos-cement sheets. It prevents absorption of moisture through the back of the sheet, thereby reducing the risk of paint failure on the face. Where the underside of the sheet is not exposed, ordinary black bituminous paint is adequate; otherwise a coloured paint treatment may be called for. Recommendations for the painting of asbestos-cement are given in Digest No. 38. Sheets painted only on the back face are not known to have cracked. This may be because the practice is uncommon but there are also technical reasons why cracking, due to differential carbonation

ing, due to differential carbonation shrinkage, should not occur under these

conditions

(Crown Copyright Reserved)

Men and Movements

M. R. Cecil Rowland Setter, J.P., F.I.O.B., who has been elected senior vice-president of the National Federation of Building Trades Employers, is chairman and joint managing

joint managing director of Stone and Co. (Bristol), Ltd. Mr. Setter was president of the Bristol Association of Building Trades Employers in 1945, president of the South Western Federation of Building Trades Employers in 1952, and is currently a member of the South Western Regional Council and of the Regional Joint Committee, as well as a Fellow of the



C. R. SETTER

as a reliow of the the Institute of Builders. He has been a members of the N.F.T.B.E. Council for about 10 years and serves on many of its committees. He was president of the Federation of Registered House-Builders in 1957, and is still a member of its Council. Mr. Setter has also served on the south western section executive committee of the Federation of Civil Engineering Contractors.

At the recent annual general meeting of the National Contractors Group of the London Master Builders Association, Mr. G. L. R. Dickens, of Sir Robert Mc-Alpine and Sons, Ltd., was elected chairman, and Mr. T. Freakley, F.I.O.B., of Taylor Woodrow Construction, Ltd., vicechairman.

Mr. C. D. Cook has resigned from the board of Hickson's Timber Impregnation Co. (G.B.), Ltd., but will remain with the company as research and development manager.

The new deputy chairman of Sir William Arrol and Co., Ltd., is Mr. W. I. French. Other changes in the organisation include the appointment of Mr. Alfred Davis, formerly special director at the Crane work, as a director of the company in full charge of the works, and the appointment of Mr. W. Reside as chief engineer at the works, where he will also continue as a special director.

Having completed 50 years' service with W. C. Simpson and Son, Ltd., painting and decorating contractors of Edinburgh, Mr. John W.

burgh, Mr. John W. Moore, who joined the firm at the age of 15, was recently presented with a gold watch. Mr. J. B. T. Loudon, secretary of the Edinburgh Branch of the Scottish Federation of Painting Contractors, Mr. D. A. Glasgow, secretary of the Edinburgh Branch of the Scottish Painters Society, and members of the staff, attended the ceremony. The photograph shows Mr. Moore receiving the gift from Mr. John F. Edmonds, senior supervisor, watched by Mr. George F. Simpson, managing director of the company.

Mr. J. S. Bright, who joined C.A.V., Ltd., last year from F. Perkins (Canada), Ltd., has been appointed service manager of the company. In his new appointment, he will be responsible for control and co-ordination of all aspects of C.A.V. service at home and overseas. Mr. C. W. Billington will continue as service manager for the U.K. and will be responsible to Mr. Bright.

A second Chair in the Department of Architecture at Sheffield University will be filled by Mr. John K. Page, B.A., who has been appointed Professor of Building Science. Mr. Page, who is at present Lecturer in Environmental Physics in the Department of Building Science at Liverpool University, will collaborate at Sheffield with the Professor of Architecture.

Mr. F. W. Tomlinson, managing director of Pyrotenax, Ltd., Mr. J. M. Willey, director and general manager of Murex Welding Processes, Ltd., and Mr. P. S. Bryant of Murex, Ltd., have been appointed to the board of Murex, Ltd. Mr. Tomlinson has also been appointed to the board of Murex Welding Processes.

Sir John Wrightson, vice-chairman an d managing director of Head Wrightsonand Co., Ltd., for the last ten years, has been appointed to succeed Mr. Richard Miles as chairman and man ag in gdirector. Mr. Miles, who has retired, has been chairman of the company for ten years, and managing director for twenty-five years, remains on the board of the parent company.



SIR JOHN WRIGHTSON

J. I. Case Co., Ltd., the newly formed subsidiary of the American J. I. Case Company, have announced the following appointments as area representatives: Mr. C. Boothroyd, will cover Yorkshire, Northumberland, Durham; Mr. R. Latham, to cover Lincolnshire, Nottinghamshire, Derbyshire, Leicestershire, Northamptonshire, Rutland, Huntingdonshire, Cambridgeshire, Norfolk and Suffolk.

Mr. Raymond G. Parker, who resigned from Witlor, Ltd., at the end of 1959, has now accepted an appointment as joint managing director of Allplant, Ltd.



Mr. A. H. Cornwall, management consultant and head of the Trofdek group of companies, is visiting San Francisco to implement a newly signed contract with the largest association of American plywood manufacturers, involving the licensing of up to 200 United States factories to begin manufacture of Trofdek ultra-lightweight roof decking within the next two years, While in America, Mr. Cornwall will cooperate with Mr. Dub Page, executive vice president of the Plywood Fabricator Service Inc., in initiating Trofdek promotion programmes throughout the U.S.A.

After 40 years' service with the company, Mr. W. T. Lawes is resigning his position as secretary and director of John Shelbourne and Co., Ltd. Mr. H. R. Pinnington, A.C.I.S., has been appointed secretary.

Mr. H. J. Cruickshank, A.M.I.Mech.E., F.I.O.B., an assistant managing director of Gilbert-Ash, Ltd., has been appointed an additional managing director.

Mr. G. Binns has resigned from the board of Robert M. Douglas (Contractors), Ltd.

MUNICIPAL

After 34 years' service with Boston B.C. and over 48 years in local government, Mr. D. G. Cockrill, borough surveyor at Boston, will retire in July.

Lambeth B.C. have been recommended to appoint Mr. Duncan H. Nicholson, at present deputy borough engineer at Shoreditch, as deputy borough engineer to succeed Mr. Charles Stainton, who will retire at the end of March after 40 years' service with the Council.

Mr. G. E. C. Webb, chief engineering assistant at Bridgwater, has been appointed deputy borough engineer by the Council in succession to the late Mr. A. H. Bonham.

The new deputy engineer and surveyor to Litherland (Lancs.) U.D.C. is Mr. Charles Minshull, previously chief assistant engineer at Nuneaton.

Mr. G. L. Laverick is to retire after 31 years as engineer and surveyor to Knottingley (Yorks.) U.D.C.

Burton Latimer (Northants.) U.D.C. have appointed Mr. A. McMillan as the new surveyor and public health officer to succeed Mr. G. Borman. Mr. McMillan is at present with Leslie (Fifes.) B.C.

Mr. J. Ford, engineer, surveyor and architect to Bishop Auckland (Durham) U.D.C., who is to retire in March, will be succeeded by his assistant, Mr. F. Mole.

Mr. James A. Rodgett, burgh surveyor at Coldstream, has been appointed burgh surveyor and sanitary inspector to Sanguhar (Dumfries.) B.C.

Ipswich B.C. have been recommended to appoint Mr. R. J. Williams as deputy borough engineer. He is at present chief engineer at Gateshead,

Taking up a new post as borough engineer at Maidstone in April will be Mr. Robert Orrell, at present deputy borough engineer at Harrogate.

Mr. G. A. Joy, borough engineer at Bexley, who has been in the Council's service since 1925, has retired. He has been succeeded by the deputy borough engineer, Mr. N. Harrison.

Brighton B.C. have appointed Mr. Frederick N. Patterson deputy borough surveyor, engineer and planning officer. He is at present deputy borough engineer at Hastings.

Mr. Jack Shepherd, water engineer at Burnley since 1933, will retire on health grounds.

SCOTTISH CONFERENCE ON **BUILDING EDUCATION**

THE eighth open conference to be arranged by the Scottish Association for Building Education was held recently at the Royal College of Science and Technology, Glasgow.

and Technology, Glasgow.

The opening address was given by Prof. Frank Fielden, C. de G., M.A., F.R.I.B.A., professor of architecture and superintendent of building classes, Royal College of Science and Technology. He said that until about the middle of the 19th century, there had been very little technical progress in building since the time of the Romans; a master of works who had constructed some of the Roman baths or villas could have fairly readily picked up the could have fairly readily picked up the threads on a 19th-century site. This was no longer the case. There was now a flood of new materials and techniques being introduced every day. The present-day builder had to be a technologist, economist and administrator, all rolled into one.

However, he doubted if the building industry was attracting the cream of youth into its ranks as were the newer industries atomics, electronics, aeronautics, physics and chemical engineering. One only had to read the Sunday papers to see the attractions offered by these indussee the attractors offered by these indus-tries. Building had a good apprenticeship system but the industry of tomorrow required something more—a builder with good educational qualifications, trained at a full-time college, with some form of practical training, either integrated with his course or immediately after it.

The Professor's address encouraged a lively discussion, especially on the advisability of training architects and builders separately or together.

Scandinavian High Buildings

T. Harley Haddow, M.I.C.E., M.I.Struct.E., consulting structural engineer, Edinburgh, opened his address with a very interesting colour film which he had taken himself in the summer of 1959, illustrating modern high buildings in Stockholm and Copenhagen. He then continued by showing details of the buildings on coloured slides, which illustrated very clearly the rapid strides which have been made in Scandinavia on this type of construction, especially with curtain wall-ing and precast work.

The Scandinavians would appear to com-plete much more of the design and detail

work before they commence construction, than is common in Britain.

Pictures were shown of precast wall sec-tions complete with triple-glazed sashes and finishings and of floor sections complete with drains and terrazzo floor finishes, standing in a precast factory ready for dispatch. The various types of curtain walling finishes in present use were also illustrated and discussed by the speaker.

The number of interested questions

The number of interested questions which were capably answered by Mr. Haddow showed very clearly how much the talk had been appreciated by the

Need for Management Training

Mr. W. Allan Gay, B.Sc., A.R.C.T.S., A.M.B.I.M., senior lecturer, Department of Industrial Administration, Royal College of Science and Technology, posed the question—"What was the need for Management Training." It was not taught in the past. Therefore, why today? He replied that today we considered it wasteful to learn always from experience; why not save time and learn from our predecessors. In addition, the complexities of today were In addition, the complexities of today were not experienced in the past.

not experienced in the past.

He felt that most was learned in management courses where the classes consisted of men drawn from various industries, because at them they could learn much by discussing the other man's problems. Management courses were not to be confused with specialised courses dealing with the changing technological trends of one particular industry.

It was often thought that the conflict in industry was between management and the trade unions but the managers of today

the trade unions but the management and the trade unions but the managers of today had to appreciate the conflicting aims in management itself. For example, those between sales and production, or between production and accounts.

He dwelt at some length on the question of communications, the method of passing on information, instructions or orders; and how the lack of clear and proper com-munications was often the biggest stumbling block to good management and

stumbling block to good management and also the cause of much misunderstanding and discord in industry.

There was a natural reluctance to accept the idea that managers could be trained. The building industry was one of the basic industries of the country he concluded and must, therefore, accept the necessity of training for management as have many of the more obviously mechanised industries.

Obituary

MR. Arthur Clifford Hartley, C.B.E., president of the Institution of Civil Engineers. Born in 1889, he began his engineering studies in 1906 at the Hull Technical College and was later at the Imperial College of Science and Technology, the City and

Guilds (Engineering) College, London. In 1910, he obtained his A. C. G. I. and raduated graduated a B.Sc.(Eng.), Lon-don University, with honours. Mr. Hartley then became a pupil of the late Mr. T. M. Newell, M.I.C.E., chief engineer of the North Eastern Railway, Hull Docks, and after-



pocks, and afterwards obtained mechanical engineering experience with Rose, Downs and Thompson, Hull, and management experience with the Limmer and Trinidad Lake Asphalt Co., Ltd. During the 1914-18 war, he was commissioned into the Royal Flying Corps. Over the period 1919-24, he was a partner in the consulting engineering firm, Maxted and Knott, specialising in the design and erection of cement works. Mr. Hartley began his long association with oil engineering when he became assistant manager in the Engineering Department of the Anglo-Persian Co. in 1924. In 1934 he became chief engineer of the company—then the Anglo-Iranian Oil Co.—and held that post until his retirement in 1951. Since his retirement he has been in private practice, and also a consultant to Rendel, Palmer and Tritton. He was elected president of the Institution of Mechanical Engineers in 1951. A memorial service for wards obtained mechanical engineering exneers in 1951. A memorial service for Mr. Hartley will be held at St. Margaret's, Westminster, on Tuesday, February 16, at

It is also with regret that The Contract Journal records the death of the following:

Mr. James Mitchell Simpson Dalgleish, aged 60. works manager of Martin, Black and Co. (Wire Ropes), Ltd., Coatbridge, from its inception in 1933 until ten years ago. Since that time he has acted in an advisory capacity.

SCOTTISH ASSOCIATION OF PAINT MANUFACTURERS

Fourteen paint manufacturers, representing approximately 70 per cent. of the industry's capacity in Scotland, announced in Glasgow recently that they had formed the Scottish Association of Paint Manufacturers with the object of promoting the interests of the industry in Scotland.

interests of the industry in Scotland.

The work of the Association will be managed by a committee consisting of Mr. A. D. Cameron (Mathews, Maclay and Manson, Ltd., Glasgow), president; Messrs, F. A. Guthrie (John S. Craig and Co., Ltd., Glasgow); and John S. Montgomerie (Montgomerie, Stobo and Co., Ltd., Glasgow), vice-presidents; Dr. W. Stuart Sim (William Sim and Sons (Paints), Ltd., Leith); Mr. R. Y. Crawford (Thomas Macintyre and Co., Ltd., Glasgow) and Mr. R. Lang (Imperial Chemical Industries, Ltd., Glasgow). Glasgow).

Glasgow).

Other firms which have, so far, joined the Association are: Hird, Hastie and Co., Ltd., Glasgow; Scottish Paints, Renfrew; Isaac Spencer and Co. (Aberdeen), Ltd., Aberdeen; Lewis Berger (Scotland), Ltd.; Ferquhar and Gill, Ltd., Aberdeen; International Paints (Scotland), Ltd.; Simpson, Thompson and Shannon, Ltd., Glasgow; and North British Oil and Paint, Ltd., Glasgow. Ltd., Glasgow.

Have you completed and posted your Readership Survey postcard?

COMPUTERS SPEED HIGHWAY DESIGN

Time Saved on U.S. Project

BY the use of a computer, integrated D with other mechanical devices, the whole process of detailed design for 11.2 whole process of detailed design for 11.2 miles of a dual-carriage roadway for the Indiana State Highway Dept., took less than 20 weeks. The highway, designed for 70 m.p.h. traffic, traversed relatively valuable farmland, which put a premium on careful analysis of right-of-way costs.

This example of the use of a computer was given by Dr. Kenneth Livesley (Lecturer in Engineering at Cambridge University) in a Paper, "The Place of Digital Computers in Civil Engineering," presented at the Institution of Civil Engineers in London last week.

Dr. Livesley has been concerned with

London last week.

Dr. Livesley has been concerned with the solution of engineering problems on computers since 1951, when he joined the staff of the newly opened Computing Laboratory, at Manchester University. Since 1955 he has been at Cambridge, where he has been respon-

sible for the computing work done by the engineering department. This work has in the past few years covered all the principal fields of engineering, and includes stress calculations for nuclear reactors, electron trajectory tracing, and the analy-sis of runway length requirements for air-craft.

In his Paper he referred particularly to the present and possible future use of computers in civil engineering practice. He did not attempt to catalogue all the engidid not attempt to catalogue all the engineering problems which have so far bear solved on computers. Instead, three applications, including two from his own experiences, were studied as representative examples from which generally valid conclusions could be drawn.

The new machines, stated Dr. Livesley, did not challenge the status of the human engineer. They were merely tools whose value was entirely dependant on the competence of their users.

Talking of Safety "DRAGEE"

ROPE blocks have a wide variety of uses around the site, but all too often these handy appliances get into inexpert hands and the primitive and haphazard arrangements we sometimes encounter are the result. At least, that is part of the outcome. All too often the final consequences are more serious and once again some well-intentioned but ill-informed worker has landed him-

self in hospital. One such incident happened recently on one of our power station sites, where a small isolated gang of men was engaged on hauling some ventilation equipment on to the flat roof of a two-storey building. to the flat roof of a two-storey building. By a coincidence I arrived on the scene at the same time as the ambulance, and I watched the attendants lift the stretcher bearing the injured man, and slide it gently into the vehicle. I knew the charge-hand by sight; a slender, keen type named Weaver, whose pleasant face was creased with worry. He quickly gave me the main facts.

"We were getting ready to lift those cast iron frames. I told Arthur—the big chap over there—to get some tackle up on the

"The heaviest is two cwts. I checked that from the advice note—I have it here in my pocket, if I can just find it. . . "
"Never mind. What happened then?"
"Arthur finished putting up the tackle, and we started to lift the big piece first. Then the support at the top came down, with the tackle, and Arthur's mate was hit on the head with one of the blocks as it fell. Gave him a nasty cut over the it fell. Gave him a nasty cut over the temple." He paused. "I telephoned for the ambulance and then I sent the lad to

the ambulance and then I sent the lad to the Engineer's Office, but he was out somewhere, so I'm very pleased you've come."

Weaver was now looking distressed. I gripped his arm and pointed to his cabin. "Take it easy." I said. "Go and sit down; I'll get someone to fetch you a cup of tea."

I gave some instructions to a young

of tea."

I gave some instructions to a young labourer, and walked over to the scene of the accident. The rest of the men had drifted away, and I knew it would be some time before that particular job could be re-organised. A severe accident like this leaves a raw feeling for many hours.

While I was extuding the warefugar Mr.

While I was studying the wreckage, Mr. Collins, the Resident Engineer, came across the site in his car and presently joined me.

"Dragee," who is a practising safety ensineer, would welcome subjects for discussion in this column. All names of persons mentioned in these discussions are entirely fictitious. Questions of law are expressed as the author's personal opinions and are not claimed to be authoritative.—EDITOR.

I gave him the information I had obtained from Weaver, and he shook his head. "What on earth were they playing at?" he demanded. "Weaver's usually a dependable type—after all, it wasn't a compli-cated job."

"True enough; but accidents nearly always happen on simple jobs—usually because people are off their guard. I suppose it's a matter of carelessness, although in this case, I'm inclined to imagine there's been a certain lack of know-how.

"In what way?"

"Just before you arrived I had a look at the tackle which came down off the roof. Weaver's pal Arthur had rigged up a sheer-Weaver's pal Arthur had rigged up a sheer-legs with some scaffold tubing. First he built a low A-frame, then he laid a 20ft. tube over it and clipped it to the apex. That came down all in one piece, so I was able to go over it with the tape. The part of the tube which jutted over the wall was 4ft. from the connection, so there was a length of 16ft. behind the A-frame, tilted down to the surface of the roof."

"And how was that secured?"

"And how was that secured?" "They had placed some old sacks, filled with about 2cwt. of sand over the end.'

"Let me see. On this kind of rig we usually allow a counterbalancing moment of 4 to 1, don't we? That means—um—a limit of 2cwt, on the burden end of the pole. And that's exactly what there was."

"Yes, but in addition there was the pull on the fall rope."

"Yes, but in addition there was the pull on the fall rope."

"Ah, yes. This is a pair of two-andone sheave blocks, so there must have been an effort of about 75lb. on the tail rope, Probably another cwt. when we include friction loss. Altogether, about 3cwt. on the end of the pole—instead of 2. Even so, there was still a fair margin of safety left"

so, there was still a fair margin of safety left."

"It should have been sufficient—even allowing for a snatch on the tail line," I replied. "The conclusion must be that the ballast wasn't properly secured to the pole—in fact, it's most unlikely that it was carrying anything like the whole load of sand. If we halve the load, the effective anchorage is only one cwt., so that the rig would be good for only about 80lb. Here is a good illustration of the importance of having proper supervision when tackle is being fitted up—even for a simple job like this. Most of the men rely upon their experience and 'feel' for lifting appliances, but just occasionally they come a cropper."

Clearly some tightening-up would have to be done in this respect. Weaver came over to tell us that a

message had just arrived from the hospital. The injured man had regained consciousness and the report was favourable. We all felt distinctly better at that piece of

NEED FOR MULTI-STOREY GARAGES IN LONDON

THE General Purposes Committee of the L.C.C. have invited discussions with the Metropolitan Boroughs Standing Joint Committee to urge their view that there should be a comprehensive plan for a phased provision of multi-storey garages in central London.

central London.

This follows a study of the summary of the report of the Committee on London Roads (Nugent Committee) which estimated that about 50,000 vehicles were daily parked on the streets of central London, and that the broad effect of clearing all parked vehicles off the streets except at parking maters might be to increase their parking meters might be to increase their traffic capacity by 15 to 25 per cent. The average cost of providing off-street garage space in central London was estimated at about £1,500 a car space and the economic charge might well be 12s. 6d. or more a day.

day.

The council's representatives on the Nugent Committee had stated, in a reservation to the report, that full provision for all the council of the report, that full provision for all the council of the report, that full provision for all the council of the report, that full provision for all the reports the report to t the present long-term parkers in inner London could involve car parking for 30,000 cars involving capital investment of some £45m. and even a reduced programme could involve heavy commitments for the local authorities concerned.

They urged the view that the need for a comprehensive system of car parks was so urgent that a "shot in the arm" policy was needed and that the Government should be prepared to make some contribution to the local authorities undertaking the initial financial risks which an enterprise of this magnitude involved.

"PREVAILING PRICES UNREALISTIC"

Chairman and managing director of Constable, Hart and Co., Ltd., Mr. H. E. Snow, has told shareholders in his annual report that he could not be any more optimistic about profits in the future than

report that he could not be any more optimistic about profits in the future than he was a year ago.

Prevailing prices for the larger type of contracts, of which motorways formed the major part, were so unrealistic that profit margins were negligible and were unlikely to contribute materially to the final result of the group, he states. These conditions were likely to continue for some time.

"Our experience on the larger type of contract has been most disappointing," says Mr. Snow.

"The N.A.T.O. airfield contract in West Germany did not prove as satisfactory as was at first anticipated, but it was our first venture abroad and provided very useful experience of the problems entailed in that type of work, which may be of benefit in the very near future. In regard to our work on the Ross Spur Motorway, changes in specification have caused delays and increased our costs."

CLERK OF WORKS DIPLOMA **EXAMINATION**

1960 A.B.T. Clerk of The 1960 A.B.T. Clerk of Works biploma Examination will be held on Thursday, Friday and Saturday, April 21, 22 and 23, 1960. The written examination will last for 2½ days with an oral examination during the last session.

Candidates are not required to be members of the Association and nonmembers participate on the same terms as members. All applicants must have had

members. All applicants must have had approved experience of at least 10 years

approved experience of at least 10 years as a skilled building operative or supervisory technician, of which five years must have been spent on the site.

Copies of the syllabus and application form, which must be returned by Saturday, April 9, 1960, may be obtained free of charge from the General Secretary, Association of Building Technicians, 156 Waterloo Road, London, S.E.1. Question papers for previous years are also available, price 2s. 6d. per set post free.

FOR THE DIARY

Annual dinner of the Institute of Builders, Guildhall, London, E.C.1. 7.15 p.m.

Meeting of the Reinforced Concrete Association at 11 Upper Belgrave Street, London, S.W.1, 6 p.m. "Lightweight Concrete Aggregates," by Prof. R. H. Evans, C.B.E., D.Sc., Ph.D., M.I.C.E., M.I.Mech.E., M.I.Struct.E. Meeting of the London Building and Engineering Contractors Accident Prevention Group at 97 Horseferry Road. London. S.W.1. 2.30 p.m. "Erection and Dismantling of Heavy Plant and Equipment"

Feb. 17 and 18.

General building safety training course at the Merseyside Building Safety Training Centre, Stopgate Lane, Liverpool, 9.

Institution of Plant Engineers. Meeting at the Royal Society of Arts, John Adam Street, London, W.C.2, at 7 p.m. "Some Problems in the Design of Large Rocket-Engine Test Beds," by R. H. B. Forster, B.Sc., M.I.Mech.E., chief engineer, and L. Breen, senior engineer, British Oxygen Wimpey, Ltd.

Meeting of the Institution of Civil Engineers (East Midlands Association) at Herbert (East Midlands Association) at Herbert 5.15 p.m. "The Preparation of Drawings and Contract Documents for Major Road Works, including Aerial Surveying," by R. Truswell, B.Sc., and G. Farrimond, B.Sc.

Trade Section

MYERS' NEW TRACK RECONDITIONING SHOP

Plant Managers' Visit to Windsor

THE service facilities available at the Windsor depot of Fred Myers, Ltd., Caterpillar dealers, were inspected by contractors' plant managers recently when the company held their first "open

when the company held their first "open house" at Windsor. Of special interest was the new track reconditioning shop. After short introductory talks given by Mr. A. N. Dixon, vice-chairman, Mr. P. Hamilton, managing director, Mr. P. A. Kingston, general parts manager and Mr. T. Stainton, general service manager, the party toured the track reconditioning shop, the service department, and the parts department. department.

Track Reconditioning Shop

This department has had recently installed a new American manufactured L. & B. electronically controlled, fully automatic double headed link welder and a Rodgers twin head track press and the party was able to see these and other pieces of equipment in operation.

L. & B. Twin Head Welder

The track before being laid on the bed is thoroughly cleaned on the surfaces in contact with the bed, i.e., the bolting faces or grouser edges. On being laid it is set up to ensure true alignment. Wooden blocks are inserted in the spaces between

blocks are inserted in the spaces between the bushing to conserve the agglomerated flux. The photo electric cell interrupters are then adjusted to suit the particular style of track. The machine after adjusting basic wire feed and travel speeds is ready to start.

If badly worn links exist with serious depressions in them the first operation is to restore them to flat surfaces. On completing this operation the weld head passes along the entire track depositing on each pair of links a bead of weld approximately win, wide by hin, deep. These dimensions are approximate and vary according to the weld pattern required. On completion of the first pass the welding head is returned to the opposite end of the carriage where after moving the wire nozzles inward the after moving the wire nozzles inward the welding process starts again. This opera-

tion continues until the track links are covered with a weld of uniform depth, Most tracks require a second layer of weld before original height of link is reached. The weld process is the same as that of the first layer. Where tracks are very re-pinning and rebushing or turning, the plates, if they are to be rebuilt, are removed. If a turning operation only is required two bolts only need be removed instead of four. This twin ram press works on the basis of having a central anvil against which the link is offered. Each ram has a push beam fitted to deal with pin pushing and bush pushing in one movepin pushing and bush pushing in one movement. The distance travelled by the ram is no more than 3in. maximum—enough to push the pin and bush clear of the link. A particular feature of this press is the rapid approach and retraction which together with powered conveyor greatly speeds up track repair.

When the track links are ready for assembly the pin complete with bushing is laid in the anvil and by one operation both



General view of servicing department

badly worn it may be necessary to apply a third layer.

Rodgers Twin Ram Track Press

If the track for rebuilding is received with grouser shoes fitted the operation mentioned above takes place without their removal. On passing to the track press for

left and right hand links are pressed on simultaneously. In assembly the links are pressed onto pin and bush. This continues until the track is assembled to correct

Limiting nuts, which are adjusted for each type of track, prevent links being pressed too far and 'at the same time accurately "space" the links in readiness for plate fitting.

Roller and Grouser Rebuilding

Roller and Grouser Rebuilding

Other work carried out in this shop includes roller and grouser rebuilding.

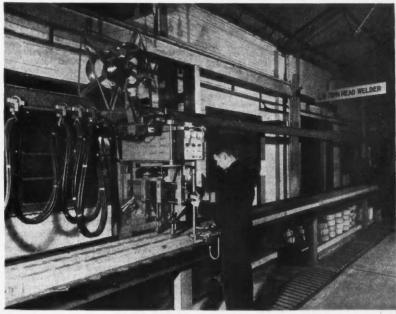
All track rollers and idlers are rebuilt on a submerged arc machine. A combination of rotation and feed speeds produces a finish which is quite satisfactory for tractor operation without machining the tread. Small size rollers may require turning because of the difficulty in applying a neat continuous weld caused by insufficient parent metal to dissipate heat.

All grousers are first trimmed on the profile cutter. This is particularly necessary on hardened grousers where satisfactory welding can only be accomplished by welding under the limit of hardness. Correct size of pre-formed welding strip is then selected—one of three—and after being cut to approximate length on the shearing machine it is "tacked" in position. Submerged are weld is then applied to both sides of strip.

A general welding section, which undertakes oxy-acetylene cutting and welding and hand arc welding, re-rims sockets; sprocket rims are available for all sizes of tractors.

Workshop Facilities

One of the important facilities offered a service exchange of complete diesel (Concluded on next page)



L. and B. twin head welder

Trade Section

NEW COMPANIES

The undermentioned particulars of new companies recently registered are taken from the daily register compiled by Jordan and Sons, Ltd., company registration agents, 116 Chancery Lane, London, W.C.2:

agents, 116 Chancery Lane, London, W.C.2:—

Brian Vincent and Son, Ltd., 45 Abbey Road, Enfield, Middx., builders. £1,000. Directors: Brian F. Vincent and Doris E. Vincent, 45 Abbey Road, Enfield, Middx.

C. Hudson and Sons, Ltd., 226-232 Pitfield Street, London, N.1, builders. £1,500. Directors: Chas. J. Hudson, 6 Dorchester Avenue, Palmers Green, London, N.13; Geo. J. Hudson, 92 Sheldon Road, Edmonton, London, N.18; Albert W. Hudson, 5 Denton Road, Edmonton, London, N.18.

Frederick Brickell and Sons, Ltd., 84a Oakley Lane, East Oakley, Basingstoke, Hants, builders and contractors. £4,000. Directors: Frederick J. Brickell and Mrs. Clarissa F. V. Brickell, The Sycamores, Oakley Lane, East Oakley, Basingstoke.

George Watson (Builders), Ltd., 100 Wulfric Road, Sheffield, 2. £600. George H. Watson, 100 Wulfric Road, Sheffield, 2. \$10,000. Directors: Edward O., Owens, Beyston, 6 Woodland Avenue, Nantwich; Benjamin P. Rogers, Maehill 305 Nantwich Road, Crewe.

Reddish Demolition, Ltd., 8 Tib Street, Manchester, 4, demolition and general contractors. £2,000. Directors: Arthur J. Clarke, 60 Clough Road, Manchester, 9; Christopher McCabe, Beech Lawn Hotel, Dudley Road, Whalley Range, Manchester, L. and G. Contractors (Sussex), Ltd., 52 Gaisford Close, Worthing, builders. £100. Directors: Sidney Lovegrove, 166 Dyke Road, Brighton; James B. Godfrey, 80 Stapley Road, Hove, 4.

John Thom (Overseas), Ltd., 20 Albert Embankment, SF 11 To carry on business

Hove, 4.
John Thom (Overseas), Ltd., 20 Albert Embankment, S.E.11. To carry on business of drilling, shaft sinking, well sinking, tunnel driving, boring, cementation, freizing, bridge building, etc. £100. Directors to be appointed by subscribers. Subscribers: John C. Collins, 25 Malford Grove, E.18 (clerk); John M. Carr, 34 Copthall Avenue, E.C.2 (solicitor).

J. A. Allen (Builder), Ltd., Spring Bank, Defford, Worcs. £100. Directors: John A. Allen and Mrs. J. Allen, Spring Bank, Defford, Worcs.

Archway Plant Services, Ltd., 64 Archway Road, N.19, industrial and agricultural plant and machinery hirers and dealers, etc. £100. Directors: John J. Curran and Mrs. Maureen Curran, 29 Baronsmere Road, N.2.
Norleigh Construction, Ltd., 79 Piccadilly, Manchester, 1, builders. £1,000. Directors: Gerald R. Lord, Raglan House, Raglan Road, Brooklands, Ches.; Bryan T. Smith, 4 Conway Road, Urmston, Lancs.
Parfitt (Pulborough), Ltd., 29 The Spinney, Pulborough, Sussex, builders and decorators. £600. Directors: Philip W. Parfitt, 20 The Spinney, Pulborough, Sussex; Joseph Wilson, 41 Rivermead, Pulborough, Sussex; Gilbert G. Chambers, Dollacott, Manser Road, Walberton, Sussex.

41 Rivermead, Pulborough, Sussex; Gilbert G. Chambers, Dollacott, Manser Road, Walberton, Sussex.

Sullivans (Derby), Ltd., builders. £1,000. Directors: Wm. Sullivan, Junr., 6 Roehampton Drive, Derby; Violet Sullivan, 567 Burton Road, Littleover, Derby.

Cameron Bros. (Builders and Decorators), Ltd., 73 Ynyshir Road, Ynyshir, Porth, Rhondda. £2,000. Directors: Emlyn G. Cameron, 73 Ynyshir Road, Ynyshir, Porth, Rhondda; Leonard E. Cameron, 15 Aberllechan Road, Wattstown, Rhondda.

Briere (London), Ltd., 56 Victoria Street, S.W.I, crane and metal workers, etc. £100. Permanent directors: Gerard R. V. Briere and Josjane J. A. Briere, St. Giles Lodge, Chalfont St. Giles.

Victor Denton, Ltd., builders. £3,000. Directors to be appointed by subscribers. Subscribers: Victor C. Denton and Mrs. Rhoda Denton, 21 Avondale Road, Gorleston-on-Sea, Great Yarmouth.

Bernard Holt, Ltd., manufacturers of and dealers in precast and reinforced concrete products, etc. £2,000. Permanent directors: Bernard Holt and Mrs. E. F. Holt, 29 Robins Wood Road, Aspley, Nottingham.

Brown and Root (U.K.), Ltd., Builders, £100. Directors to be appointed by subscribers. Subscribers: S. A. Shaw (solicitor) and Jeremy Waddell (clerk), St. Swithins House, Walbrook, E.C.4.

The name of Mullen-O'Dea and Co., has been changed to John O'Dea, Ltd., their new address being 145 Otley Old Road, Lawnswood, Leeds, 16. Tel: Leeds 673032.

Rose Green Concrete Co. (Bristol), Ltd. £100. Directors not named. Subscribers: Percy O. Ansell (commercial manager) and George A. Corderoy (assistant manager), 116 Chancery Lane, W.C.2.

(Concluded from previous page)

engines, starting engines, clutches, torque converters, fuel injectors, transfer pumps, water pumps, etc.

Engines are rebuilt to Caterpillar standards and are dynamometer tested. A three month warranty accompanies all service exchange engines. rebuilt to Caterpillar

Where an engine is required immediate dispatch or installation of the unit is arranged. No charge is made at this stage. On receipt of the worn out or defective engine a rebuild takes place and the customer then receives an invoice for repair, A range of engines to fit the D2, D4, 955, D7, D8, D9 and DW21 is offered.

Parts Facilities

Parts Facilities

Each depot, at Windsor, Brentwood and Ashford, Kent, has its own parts store, its own parts manager and is a self-contained unit, responsible for supplying parts for customers' machines in their particular territories. Inventories are based on sales histories and parts sales potential; there is no financial limit imposed.

Inspecting the parts store and showrooms the contrators' plant managers were told that over the last few years the Windsor Depot had given an average 91 per cent. service efficiency direct from stock—on every order of 100 items, 91 complete in quantity had been shipped direct from stock. The remainder had been obtained from other depots, other U.K. dealers or from the stocks held at Leicester by the Caterpillar Tractor Co. Occasionally they had to employ emergency methods of bringing in parts by air or fast steamer; each of these sources was in direct communication with the depot by teleprinter network. Although stocks were built up on sales histories the company took pride and care to cater for new equipment, and they already held parts for the latest 619 motorised scrapers and more were on the water.

New Machines

New Machines

During the visit the party was able to see a number of new machines including the 619 two-wheel tractor and 422 scraper;

the 619 two-wheel tractor and 422 scraper; the Glasgow manufactured D8 series "H" tractor, and the D7 and D6 tractors.

The 619 and 442 tractor-scraper combination is the latest rubber-tyred addition to the Caterpillar motor-scraper line, and was described in *The Contract Journal* on April 30 last. The scraper capacity is 14 cu. yd. struck and 18 cu. yd. heaped and powered by 225 b.h.p. turbo-charged engine. The 442 scraper is British built at Caterpillar's Newcastle plant.

TRADE NEWS IN BRIEF

A weight calculator, made of cardboard and operated on the slide-rule principle, is available from Uddeholm, Ltd., Northwood Street, Birmingham. 3, for facilitating the calculation of strip steel.

of strip steel.

W. J. Brooker, Ltd., 28 Westminster Bridge
Road, London, S.E.I. announce the formation
of an associated company, Brook-Blast, Ltd.,
to specialise in on-site shot blasting, metal
spraying and protective coating operations.

"Lifting for Industry," is the title of a
l6mm., 40-minute coloured film produced for
Tarslag, Ltd., Rotherham, by Wrigleys, Ltd.,
Rotherham. It illustrates the savings which
may be made by planning a heavy construction or installation job according to the equipment available.

Rapid Metal Developments, Ltd., have

Rapid Metal Developments, Ltd., have opened a new depot at Bennett's Yard, Spurlings Lane, Wallington, Fareham, Hants. Tel:

A new coloured brochure describing their derrick cranes has been published by John M. Henderson and Co., Ltd., King's Works.

Aberdeen.

Information on the bonding of Rigidex high density polythene is given in Technical Information Sheet No. 9, issued by British Resin Products, Ltd., Devonshire House Piccadilly, London, W.I.

The large quantities of engineered timber, both bolted and connectored and glued-laminated specified for attackers.

Ine large quantities of engineered timber, both bolted and connectored and glued-laminated specified for structures of all types are represented in a series of booklets, specification sheets and load tables available from the Rainham Timber Engineering Co., Ltd., Ferry Lane, Rainham, Essex.

Metalock (Britain), Ltd., have opened an office at Windsor Chambers, Bearwood Road, Smethwick, Birmingham, 41. Tel: Bearwood The Lightfore Poficiery 1.

The Lightfoot Refrigeration Co., Ltd., have opened a new branch office at Canute Road, Southampton.

A booklet giving a full explanation of the functions of BCL Blanket Dampcourse—a low-cost, waterproof and durable material, claimed to overcome the problems of moisture penetration in concrete house-rafts—has been published by British Cellophane, Ltd., 9 Henrietta Place, London, W.l.

Mercantile Credit Co., Ltd., have opened new branch offices at 2 Wynnstay Road, Colwyn Bay, and Wycombe House, Aversham Hill, High Wycombe.

Thos. W. Ward, Ltd., Albion Works, Sheffield, have produced a new leaflet on their Comprisorip material for sealing expansion joints.

Compri-Strip material for sealing expansion joints.

Two new brochures featuring the Allis-Chalmers HD.21 and HD.16 crawler tractors are available from Mackay Industrial Equipment, Ltd., Central way, Feltham, Middx.

The latest edition of "Concrete Facing Slabs" is now available, free of charge, from the Cement and Concrete Association, 52 Grosvenor Gardens, London, S.W.1.

Edward Wood and Co., Ltd., have transferred their London office to 78 Buckingham Gate, London, S.W. Tel: Abbey 1948-9.

Two publications—"The Measurement of Pore Water Pressures in Earth Dams and Road Embankments" and "Corrosion Surveys"—have been received from Soil Mechanics, Ltd., 65 Old Church Street, London, S.W.3.

Rockweld, Ltd., Commerce Way, Croydon, have produced a new brochure which describes their recently introduced Comet process—semi-automatic welding with CO. shielding.

shielding.

A change of title has been announced by the Hire and Sales Division of Scaffolding (Great Britain), Ltd. It is now known as SGB Building Equipment Division.

The management and staff of United Dominions Trust's Metropolitan regional officave been moved to new offices at 199-201 Marylebone Road, N.W.I. Tel.: Ambassador 1272

INDUSTRIAL FAN UNIT

General Trade Equipment, Ltd., 89-92 Seymour Place, London, W.1, are to market a new industrial fan unit with open wire spiral-type heating elements operating at black heat under all conditions. The thermostat can be hand-set to cut off the

current automatically if overheating occurs.

As an additional safety precaution the As an additional safety precaution the fan units are fitted with suspension straps, deflector louvers and \$\frac{1}{2}\times \text{in.}\$ were mesh screens. The direct starting motor is fitted with resilient mounted ball-bearings. A detachable air filter can also be fitted. The fans are supplied in seven different sizes, the smallest with a five-kW output (B.Th.U. per hour 17,000) and the largest with a kilowatt output of 40 (B.Th.U. per hour 136,000).

ARUP ACQUIRE TWICKENHAM PLANT

Arup and Arup, Ltd., have acquired Twickenham Plant and Engineering Co., Ltd., and have changed the name to The Hercules Plant Hire Co., Ltd., with head-quarters at 45 Hornsey Road, London, N.T. Members of the Board of Hercules Plant are A. S. Arup, J. D. Arup, C. E. Hilditch and A. E. Sancto.

Current **Constructional Activities**

AWARDS PROJECTS CONTRACTS

THIS editorial feature provides readers with a comprehensive news service covering forthcoming private and public construction work. Commencing on this construction work. page information is given concerning future projects followed by details of tenders being invited. In the third section will be found news of tenders recommended for acceptance, tenders accepted and contracts awarded. Attention is also drawn to the advertisements covering contracts and appointments appearing in the front part of the Journal.

BUILDING AND DECORATING

(See also Housing Schemes)

Aberdeen.—City Council have approved final plans for a technical college in Spring Garden. Estimated cost £1m.
Abingdon, Berks.—R.D.C. have approved the development of site at rear of Eims Parade, Botley, including the provision of a community centre. Estimated cost £35,000 to £40,000

Botley, including the provision of a community centre. Estimated cost £35,000 to £40,000.

Aycliffe, Dur. — Cordingley and McIntyre, Owengate, Durham City, are the architects for factory additions on Aycliffe trading estate for Kleemann Plastics, Ltd., and E.N.V. Engineering Co., Ltd. No contracts let.

Basingstoke, Hants.—B.C. recommended to prepare detailed plans and apply for sanction to borrow £225,862, for the erection of municipal buildings.

Belford, Northumb.—R.D.C. to spend £4,000 on the erection of new Council offices. Plans to be prepared by the Council's architects, Richard Turley and Associates, 46 Jesmond Road, Newcastle upon Tyne.
Berwick, Northumb.—Newcastle upon Tyne. Berwick, Northumb.—Newcastle upon Tyne Hospital Board to proceed with plans for ward block at Berwick Infirmary.

Bekley, Ken: —B.C. recommended to prepare revised plans for the proposed boathouse and cafe in Danson Park.

Birmingham.—Chamberlain, Powell and Bon, Avenue Studios, 15 Sydney Mews, Fulham Road, London, S.W.3, are architects, and Davis, Belfield and Everest, 9, Ashley Place, London, S.W.1, the quantity surveyors, for the erection of a physical education sports centre at Edgbaston, for the University of Birmingham. Estimated cost £550,000.

Blaydon, Dur. — Mr. Fillis, Newburn Road, Throckley, seeking planning permission to construct a factory on a former football ground near Patterson Street.

U.D.C. have approved plans for the erection of new premises, for the Vale of Derwent Social Club, Rowlands Gill. The scheme has still to be approved by the county planning authorities. The architect is J. M. Angus, 3 Gallowgate, Newcastle upon Tyne.

Brentford and Chiswick, M'ddx.— C.C. recommended to authorise the second instalment of adaptation, etc., at Staveley Secondary Girls School. Estimated cost £41,732.

Brighton, Sussex.—B.C. recommended to invite tenders for the erection of an occupation and training centre at the north-east side of

dary Girls' School. Estimated cost \$41,732.

Brighton, Sussex.—B.C. recommended to invite tenders for the erection of an occupation and training centre at the north-east side of Coldean Lane and five brick bus shelters at Bexhill Road, Birdham Road, The Avenue, Carden Hill and Dyke Road, estimated cost \$51,000 and \$700 respectively; subject to Ministry approval, invite tenders for construction of an old people's home at Roedale Nursery site.

tion of an old people's home at Roedale Nursery site.

B.C. recommended to approve plans for a new warehouse, extension of existing warehouse, and installation of petrol tanks at 14 Clifton Hill, for Stapleton Brothers, Ltd.; erection of eight shops with four flats over at the iunction of Saltdean Vale and Westfield Avenue for Baylis and Co. (Builders), Ltd., 37 Upper St. James Street; light industrial factory at South Side. The Hyde, Bevendean, for West Instruments. Ltd., 51 Regent Street; outline application for rebuilding the Albion Public House at Albion Street, for Tamolins, Ltd., Pheonix Brewery, I Richmond Terrace; licensed premises, restaurant, garage, lock-up shops and 48 flats at the Albemarle Hotel site. Marine Parade, for the Hammerson Group of Companies, Quadrex House, Park Lane, London, W.1.

Burnley, Lancs.—Work expected to commence this year on the erection of a new Nursery site. B.C. recon

parish hall for St. Matthew's. Estimated cost £8,500.

Buxton, Derbys.—B.C. recommended to approve plans and invite tenders for the erection of public conveniences at Water Street and Harpur Hill.

Camberley, Surrey.—C.C. recommended to approve sketch plans for a new four-form entry secondary mixed school at Old Dean County Secondary School. Estimated cost £233,172.

Carlisle, Cumb.—F. C. Lecture

County Secondary School. Estimated cost £233,172.

Carlisle, Cumb.—F. G. Jackson, Lowther Arcade Chambers, Lowther Street, is the architect for redevelopment scheme at 25-37 Castle Street for a new company. The proposal includes rection of shops and offices, printing works, warehouses, etc.

Chertsey, Surrey.— C.C. recommended to approve sketch plans for extensions to provide additional dormitory, teaching and staff accommodation and gymnasium at Ottershaw School. Estimated cost £60,885.

Chester.—City Council recommended to approve draft layout of land at Blacon Campincluding the provision of a shopping centre. Chester-le-Street, Dur.—Plans are being prepared for the construction of an office block, for the Caterpillar Tractor Co., Ltd.. The architects are Wilson, Hamilton and Wilson, 5 Woodside Terrace Glasgow, C.3.

Chorley, Lancs.—Parochial Church Council have approved the erection of a new vicarage at St. John's Whittle-le-Woods. Estimated cost £8,000.

Colwyn Bay, Denbighs.—B.C. have approved scheme for extensions.

Chorley, Lanes. — Parochial Church Council have approved the erection of a new vicarage at St. John's Whittle-le-Woods. Estimated cost £8,000.

Colwyn Bay, Denbighs.—B.C. have approved scheme for extensions to the aviary in Eirias Park by the development of the terraced enclosure. Estimated cost £1,500.

Croydon, Surrey. — B.C. recommended to spend £100,000 per annum on the modernisation of pre-war dwellings during the years 1960-61 and 1961-62.

Croydon, Surrey.—B.C. recommended to approve adaptations to Coombe Cliffe House. Coombe Road. Estimated cost £9,000.

Darlington, Dur. — The Wear, Tees and Eskdale Regional Group of the Youth Hostels' Association are raising funds for the rebuilding of the Teesdale centre at Langdon Beck. The cost will be £9,000.

Durham.—R. E. Coleman, Ltd., 63 Western Hill, are to erect offices at Carrville.

City Council planning new conveniences costing £1,600.

Elstree, Herts. — R.D.C. hope to invite tenders this year for the erection of a public hall and swimming pool opposite the police station in Elstree Way. Estimated cost £236,000. Sketch plans have been prepared.

Enfield, Middx. — C.C. recommended to authorise the erection of a school meals kitchen at Chase Boys' Secondary School. Estimated cost £5,950.

Eston, Yorks. — Richard Dawkins, 14 Thirlmere Crescent, Normanby, is seeking permission to erect licensed premises in Normanby Road, South Bank-on-Tees.

Faraham, Surrey. — C.C. recommended to approve sketch plans for extensions to provide additional studio accommodation at the School of Art. Estimated cost £11,482.

Felling, Dur.—A contract will be let son for the erection of R.C. church and presbytery at Colegate Lane. Leam Lane estate. The architect is D. Brown, 10 Lambton Road, lesmond, Newcastle unon Tyne.

Felham, Middx.—C.C. recommended to approve the erection of R.C. church and presbytery at Colegate Lane. Leam Lane estate. The architect is D. Brown, 10 Lambton Road, lesmond, Newcastle unon Tyne.

Felham, Middx.—C.C. recommended to erect public-house to be known as

factory.

Goole, Yorks.—Crendon Concrete Co., Ltd., Aylesbury, Bucks., to acquire land on the Rawcliffe Road industrial estate for factory.

Halifax, Yorks.—Working drawings are being prepared for erection of a new C. of E. Secondary Modern School, for the Governors of Holy Trinity C, of E. Transferred Modern School. Iones and Stocks, architects, 7 Blenheim Terrace, Leeds, 2; Eric Walmsley and Co., quantity surveyors, 19 Bull Green. Halifax; R. W. Gregory and Partners, heating consultants, 1 Brazennose Street, Manchester, 2. Estimated cost £102,609.

Harrogate, Yorks.—Ministry have granted planning permission to Mercantile Credit Co., 132 Addition Street, Leeds, I, for erection of a block of offices at the east end of Victoria Avenue, and to the Sons of Temperance Friendly Society, 77 Gt. George Street, Leeds, I, for conversion of the Baicombe Private Hotel, 21 Victoria Avenue into a national head-

Leeds Regional Hospital Board have ap-Leeds Regional Hospital Board have ap-proved extension of the physiolnerapy depart-ment at Harrogate General at a cost of £13,000; preparing skeich plans for a new operating theatre suite and the planning of a new patho-logy department.

ment at Harrogate General at a cost of £17,000; preparing sketch plans for a new operating ineatre suite and the planning of a new pathology department.

Harrow, Middx. — C.C. recommended to approve the extension of Roxeth Manor Secondary Boys and Girls' Schools. Estimated cost £171,773.

Hatfield, Herts.—R.D.C. have approved in principle scheme for improvements to pre-war old people's flats; are considering plans for the erection of a block of two-bearcoom flats or maisonnettes at the junction of Birchwood Avenue and Birchwood Close.

Hebburn, Durham.— J. T. Bell and Sons, Market Street Chambers, Newcastle upon Tyne, have offered to construct a shopping centre in the Station Road area, and the matter is being considered by the U.D.C.

Hersham, Surrey.— C.C. recommended to approve sketch plans for adaptations to nutted classroom block, etc., at Rydens County Secondary School. Estimated cost £4,287.

Heywood, Lancs.— Co. E.C. have approved scheme for erection of a new scullery and cloakroom at Bullough Moor County School. Hinckley, Leics.—Sheffield Regional Hospital Board have approved scheme for provision of maternity unit on land behind Hinckley and District Hospital in Mount Road. Estimated cost £60,000.

Legh, Lancs.—Co. E.C. have approved a proposal that a swimming bath, 60tr. by 30tr., be incorporated in the design for the new Chantry Secondary Modern School.

Leigh, Lancs.—Co. E.C. have approved spending of £1,450 on extensions and improvements to kitchen at Boys' Grammar School.

Leigh, Lancs.—Co. E.C. have approved spending of £1,450 on extensions and improvements to kitchen at Boys' Grammar School.

Leigh, Lancs.—Co. E.C. have approved the erection of public conveniences at Stanner Bank corner for public conveniences at Stanner Bank corner for public conveniences at Stanner Bank corner for the public convenience at Stanner Bank corner for the public co

Plans to be prepared. Estimated cost £12,000. Lytham St. Annes, Lancs.—B.C. recommended to approve in principle the erection of public conveniences at Stanner Bank corner of Fairhaven Lake.

Mansfield, Notts.—B.C. recommended to approve scheme for the provision of new back doors for 90 prefabricated bungalows at Good-acre housing estate, estimated cost £1,350; plans for the erection of a boys' secondary technical school at Sherwood Hall Road, for Co. E.C.

Middlesbrough, Yorks.—Parks Committee have approved scheme for the rebuilding of Marton Hall in Stewart Park. Estimated cost £32,000.

have approved scheme for the rebuilding of Marton Hall in Stewart Park. Estimated cost 632,000.

The Sutton Dwellings Trust are to erect 31 houses near Freemantic Crescent to plans by C. S. Errington, 46 Grainger Street, Newcastle upon Tyne. Plans have been prepared by Kitching and Co., 21 Albert Road, for ablutions block at the Docks, Middlesbrough sidings, for Henderson Clarke; developments at Linthorpe Road and Bottomley Street for hotel, for J. Eadie, Ltd.; and alterations and additions in Roman Road, for the Masonic Hall (Middlesbrough), Ltd., to plans by N. H. Cox, Vaux and Associated Breweries, Ltd., Sunderland.

B.C. recommended to approve the erection of children's home at Croft Avenue, Acklam. Estimated cost £5,400.

Mitcham, Surrey. — C.C. recommended to approve sketch plans for extensions to provide additional practical accommodation at Weston Road County Secondary Boys' and Girls' School. Estimated cost £4,371.

Morpeth. — Newcastle upon Tyne Hospital Board are to erect tea room and shop at St. Mary's Hospital, Stannington.

Newcastle upon Tyne.—G. A. Dunn and Co., Grainger Street, have acquired the adjoining Grainger Cinema for shop extensions. New workshops and offices are proposed in George Street, for Black and Decker. Ltd. (the architect is M. Gatoff, 26 Mosley Street, Newcastle upon Tyne; C. Solomon 30 St. Mary's Place, is the architect for the

conversion of public-house in New Bridge Street into shops; Newcastle Breweries, Ltd., Haymarket, are to convert factory in Bath Lane Terrace to a bonded store, warehouse canteen and offices, and have prepared their own plans; drying rooms are to be erected at Elswick Leatherworks to plans by L. J. Couves and Partners, Grainger Chambers, Hood Street; Freeman Morrison, Ltd., 18 Nixon Street, are to erect a single-storey warehouse at 961-73 Scotswood Road and have prepared their own plans.

John T. Bell and Sons, Market Street, propose erection of a hotel to cost between £750,000 and £lm. at the corner of Northumberland Road and the proposed new Princess Street. The project has still to be considered by the Planning Committee.

E.C. intends using an alternative site, to one in Bath Lane, for extensions to the College of Further Education, which will cost £268,000.

Nuneaton, War.—B.C. recommended to prepare scheme for the provision of 30 garages.

E.C. intends using an aiternative site, to one in Bath Lane, for extensions to the College of Further Education, which will cost £268,000.

Nuneaton, War.—B.C. recommended to prepare scheme for the provision of 30 garages at housing estates and repair and improvement of 38-64 Bottrill Street.

M.E. have approved plans for extensions to Red Deep's School, for B.C.

Ormskirk, Lancs.—Parochial Church Counchave approved the erection of a new church school at Rufford. D. Bradshaw and E. I. Linton, 10 Dale Street, Liverpool, 2, are the consulting architects. Estimated cost £22,000

Ossett, Yorks.—B.C. recommended to approve in principle sketch plans for erection of library building on site of present library in Station Road. Estimated cost £30,000.

Penrith, Cumb.—Extensions proposed to Newton Rigg Farm School, for the Cumberland and Westmorland Education Committees.

Prudhoe, Northumb.—Working drawings are being prepared for further extensions costing £430,000 to Prudhoe and Monkton Hospital, for Newcastle Hospital Board. It is not expected that actual constructional work will begin until September. The work is divided into two sections. Plans for one section are by the Board's Chief Architect (P. H. Knighton), and S. W. Milburn and Partners, 9 Esplanade, Sunderland, are architects for the other section.

Scarborough, Yorks.—Scarborough Co-op Society, Ltd., are to creet dairy and funeral furnishing departments at Seamer Road and have prepared their own plans; plans have been prepared by Broadbent, Thompson and Wilson, Hillary Chambers, Hillary Place. Leeds, 2, for the erection of a depot on an industrial site at Queen Maragarets Road for T. Wall and Sons, Ltd., London; G. W. Alderson, 4 Pavilion Terrace, is the architect for a new machine room in Melrose Street, for E. T. W. Dennis and Sons, Ltd., D. Hellewell, 7 Green Lane, Newby is the architect for dressing rooms for the Scarborough Rugby Union Football Club.

Seaham Dene. No contracts let.

Sedgefield, Dur.—R.D.C. proposes public conveniences at Front Street, Bi

Snaith, Yorks.—West Riding C.C. have approved the purchase of land to the south of Field Road for proposed junior and infants

Snaith, Yorks.—West Riding C.C. have approved the purchase of land to the south of Field Road for proposed junior and infants' school.

Southampton.—B.C. recommended to approve sketch plans for Hightown Secondary School and new housecraft room, etc., at Mount Pleasant Secondary Girls' School; appoint E. W. H. Gifford, 16 Carlton Crescent, as consulting engineer for the design of the structure and authorise the Borough Architect to prepare working drawings and bills of quantities and invite tenders for the erection of the branch library for Harefield and Thorn-hill housing estates. Estimated cost £25,000.

B.C. recommended to appoint E. M. Galloway and Partners, 10 Portland Street, W. H. Saunders and Son. 22 Brunswick Place, Sutcliffe, Brandt and Partners, 57 Above Bar. and Fowler. Grove and Haggar, 140 Lodge Road respectively, as architects, for improvements to lavatories at St. Jude's C.E. Infants, Freemantle C.E. Junior and Infants, Shirley Warren Infants' and Shirley Warren Infants' and Shirley Warren Infants and Shirley Warren Infants' schools; Weston Burnett and Thorne, 41 Westwood Road, as architects, and MacPherson and Partners, Freemantle Lodge, Foundry Lane, as quantity surveyors, for a new lavatory block and improvements to sanitary facilities at Ascupart Junior and Infants' School; E. Morley-Smith, 17 Cumberland Place, as quantity surveyor, for three classroom extension at Weston Park Infants' School; invite tenders from selected contractors for the precast concrete structure of Glen Eyre Boys' School; approve scheme for the construction of a rescue training set, estimated cost £4,000.

Staines, Middx.—C.C. recommended to approve the extension of the Abbotsford Secondary Boys' and Girls' Schools. Estimated cost £110,915.

Stockton-on-Tees, Dur.—M. Trotter, 134 High Street, is the architect for warehouse and

Stockton-on-Tees, Dur.—M. Trotter, 134 High Street, is the architect for warehouse and

office at Brunswick Street, for T. Turnbull, Green Lane. Sunderland, Dur.—Corporation Seaside

office at Brunswick Street, for T. Turnbull, Green Lane.

Sunderland,
Dur.—Corporation Seaside
Development Committee is including £80,000
in its annual estimates for the erection of a
building at Seaburn which could be used for an
ice-rink or a cafeteria. The sum of £25,000
has also been earmarked for a commencement on the £75,000 Roker blockyard redevelopment scheme.

Sunderland, Dur.—B.C. recommended to
carry out extensions to Bishopwearmouth
Crematorium. The work will include new
furnace room with cinerary unit, reception
chamber and small chapel of rest. Estimated
cost £14,100

Sutherlandshire.—C.C. recommended to approve an £834,000 school building and improvement scheme for 1960-63, including new
senior secondary school at Golspie, £248,000,
and at Dornoch, £230,000; a school hostel
for boys in Golspie, £65,000, and an assembly
hall and dining hall at Helmsdale Junior
Secondary School, £30,000.

Sutton, Surrey.—B.C. have approved plans
for extensions at 41-43 High Street, for
Barclays Bank, Ltd., 54 Lombard Street,
London, E.C.3.

Swansea.—Cyril A. Hughes and Son, 51
Walter Road, Swansea, are the architects in
collaboration with G. R. H. Rogers, company
architect, for the proposed erection of The
Wildfowler public house at Clase housing
estate, Morriston, for Wm. Hancock and Co.,
Ltd., the Brewery, Cardiff (scheme in early
stages).

Twickenham, Middx.—C.C. recommended to approve the proposed erection of Broom Road Secondary School. Estimated cost £230,175.

£230,175.

Tynemouth, Northumb.—E.C. have decided on a site near Billy Mill reservoir for the erection of the proposed Whitehouse County Primary School. The architects are J. G. Cowe and Son, Claremont Chambers, Claremont Place, Newcastle upon Tyne. Simpson, Lawson and Partners, Emerson Chambers, Blackett Street, Newcastle upon Tyne. are the architects for erection of factory at Burdon Main Road, for S. Robson, Longston Avenue, Cullercoats.
E.C. to proceed with a £30,000 scheme for improvements to toilets at the Western Junior Mixed and Infants' School M.E. is being asked to approve the construction of an additional laboratory at Tynemouth High School.

ditional laboratory at Tynemouth High School.

West Hartlepool, Dur.—Scottish Brewers. Ltd., Abbey Brewery, Holyrood Road, Edinburgh, 8. are planning the erection of a public house at Kingsley Avenue. The firm have their own architect.

West Riding.—C.C. propose new aged persons' homes at High Green and Mill Hill. Pontefract (each costing £48,400) and at Gargarave (£42,100): new occupation centres at Horsforth and Holmfirth (each £34,700); Harrogate (£33,920), and Rawcliffe (£31,600); and a child welfare clinic at Selby Costing £16,150.

Whitby, Yorks.—Halls (Contractors), Ltd.. Baxtergate, are to erect a wrought-iron factory and joiners' workshop at Ruswarp, and plans have been approved.

Whitley Bay, Northumb.—Walter Glynn. 2 Rossway. Monkseaton, is seeking planning permission to carry out a £500,000 development scheme on a site at The Links, providing for a 10-storey building, comprising bus station, conference hall, restaurant and Pigg, architects, 17a Northumberland Square, North Shields.

Willesden, Middx.—C.C. recommended to

North Shields.

Willesden, Middx.—C.C. recommended to authorise the extension of the library at Willesden, MiddX.—C.C. recommended to authorise the extension of the library at Kilburn Polytechnic. Estimated cost £1,350. Wisbech, I. of E.—B.C. have approved first stage of scheme for the adaptation of the Old Vicarage. Estimated cost £10,000 to

£12,000.

Wolverhampton, Staffs.—W. Butler and Co., Ltd., Springfield Brewery, to appoint H. Vale and Sons, quantity surveyors, Waterloo Road, to prepare bills of quantities for rebuilding the Lord Raglan at Great Bricklin Street. Plans by staff architects' department.

York.—George G. Pace, 18 Clifton Green. York, are the architects and Thompson and Alexander, 6 Cromwell Place, London, S.W.1, the quantity surveyors, for rebuilding of the church of St. Martin-le-Grand, in Coney Street. £12,000.

ELECTRICAL

Kingston-upon-Thames, Surrey. — South-West Metropolitan Regional Hospital Board recommended to approve the appointment of Barlow, Leslie and Coombes. 5 Catherine Place, London, S.W.I, as consulting engineers for the replacement of three lifts at Kingston Hospital.

FENCING

Barrow-in-Furness, Lancs.—B.C. recom-mended to approve the fencing of the former Bridgegate refuse tip. Estimated cost £600.

GAS AND WATER SUPPLY

Cemaes, Pembs. — R.D.C. to proceed with the Tegryn water supply improvement scheme.

Cemaes, Pembs. — R.D.C. to proceed with the Tegryn water supply improvement scheme. Chippenham, Wilts.—B.C. recommended to apply for sanction to borrow £1,000 for laying water mains at Cedar Grove.

Huntingdon. — B.C. recommended to approve, in principle, scheme for the construction of a 250,000-gallon capacity water tower at Sapley.

Leamington Spa, War.—B.C. recommended to apply for sanction to borrow £5,000 for the provision of new water mains.

Limerick, Eire.—City Council recommended to approve a water supply scheme. Estimated cost £26,000.

Morley, Yorks.—B.C. recommended to apply for sanction to borrow £2,260 for laying of water main on Moorhead estate, part two, and £510 for extension of water main on land off School Street, Churwell.

Oxford.—City Council recommended to apply for sanction to borrow £3,301,500 for the construction in two stages, of the proposed impounding reservoir and source works, including new treatment and pumping works in the Eynsham area. Plans prepared by Binnie Deacon and Gourley, consulting engineers, Artillery House, Artillery Row, London, S.W.I.

City Council recommended to proceed with scheme for the provision of a water supply to the Noke/Charlton-on-Otmoor area. Estimated cost £8,300.

Peterborough.—City Council recommended

cost £8,300. Peterborough.—City Council recommended to approve, in principle, scheme for the provision of two replacement boreholes each at Wilsthorpe and Etton. Estimated cost 555 000

Worcester.—City Council recommended to approve scheme for reconditioning the rotary band screens at the waterworks. Estimated cost £2,020.

HOUSING SCHEMES

Beccles, Suffolk.—B.C. recommended, subject to Ministry approval, to invite tenders for the erection of houses and garages at Queen Elizabeth Drive.

Bexhill, Sussex.—B.C. recommended to submit to Ministry and Local Planning Authority, for approval, scheme for the erection of one block of eight and one block of four aged persons' flats at the Suffolk Road site.

site.

B.C. recommended to approve outline application for a block of 36 flats and 20 garages, adjacent to The Bex, De La Warr Parade, for Marsden (Kent), Ltd., la Sanderstead Road, Orpington, Kent.

Blandford, Dorset.—B.C. recommended to prepare plans for the erection of two blocks of three-storey flats at Eagle House site.

Cheltenham, Glos.—B.C. recommended to prepare detailed plans and negotiate a tender with Wates, Ltd., 1258 London Road, London, S.W.16, for the erection of an eight-storey block of 38 flats, to be known as Charlotte House.

House.

Croydon, Surrey.—B.C. have approved the following planning applications: Sixteen flats and eight garages at 13 Beulah Hill, Upper Norwood, for Tamworth Park Construction Co., Ltd., 2 Thrale Road, Streatham, London, S.W.16; 50 flats or maisonnettes adjoining Queens Hotel, Church Road, Upper Norwood, for Premium Securities, Ltd., 1 Cumberland House, Kensington Court, London, W.8; 17 flats and 15 garages at 230-232 South Norwood Hill, for Acrobin, Ltd., 7 Alderbrook Road, London, S.W.12.

Grantham, Lines.—B.C. recommended to

Grantham, Lincs.—B.C. recommended to ubmit to Ministry, for approval, scheme for the erection of 291 houses at Earlesfield estate,

submit to Ministry, for approval, scheme for the erection of 291 houses at Earlesfield estate, during the year.

Great Yarmouth, Norfolk.—B.C. recommended to approve the provision of a house for the parks superintendent at Gorleston. Estimated cost £2,500.

Henley, Oxon.—R.D.C. have approved plans for the erection of 25 Unity-type bungalows at various sites during this year.

Ilkeston, Derbys.—B.C. recommended to approve plans and invite tenders in due course for the erection of 47 dwellings at Kirk Hallam No. 2 (north) site.

prove plans and invite tenders in due course for the erection of 47 dwellings at Kirk Hallam No. 2 (north) site.

Luton, Beds.—Borough Architect to prepare plans and bills of quantities and invite tenders in due course for the erection of four houses at Eaton Green Road.

Maidstone, Kent.—B.C. to submit to C.C. for approval, outline application for the conversion of 43 Kingsley Road, into three flats.

B.C. recommended to approve outline application for the erection of a block of 15 flats on land on east side of Foley House. Sittingbourne Road, for New Thornhill Estates, Ltd.

Newark, Notts. — Ministry have approved R.D.C.'s plans for the erection of 100 houses during this year.

Norwich.—City Council recommended to approve the erection of 200 dwellings during 1960-61.

Pontypool, Mon. — U.D.C. have approved scheme for the erection of 300 houses at Trevethim during this year.
Portland, Dorset.—U.D.C. recommended to approve the erection of approximately 50 houses for stage four of the Verne Common development scheme.
Romford, Essex.—B.C. recommended to approve scheme for a block of 12 flatlets for aged persons at Waterloo Road.
Rowley, Regis, Staffs.—B.C. recommended to negotiate with Selleck Nicholls and Co., Ltd., St. Austell, Cornwall, for the erection of flats on various sites.
Smethwick, Staffs.—B.C. recommended to approve layout and invite tenders in due course for the construction of 105 dwellings. 60 garages and 100 stores at the redevelopment site No. 3, the first phase (Poplar Street section), comprising one 12-storey and three five-storey blocks.
Staines, Middx.—L.C.C. approved proposals for the erection of 115 houses and flats, 67 garages, a workshop and a shop at Hengrove Farm. Estimated cost £232,652.
Stockport, Ches.—B.C. recommended to negotiate tenders with G. Wimpey and Co., Ltd., and Unity Housing, Ltd., for the erection of 63 and 54 dwellings respectively at Canal Bridge Farm estate, stage II, contracts 7 and 8.
Sutton and Cheam, Surrey.—B.C. propose eight flats in a two-storey block and eight bunglance Demolition of three houses and the

eight flats in a two-storey block and eight bungalows at the rear of The Rectory, Malden Road, Cheam.

B.C. have approved the following outline plans: Demolition of three houses and the erection of 12 three-room flats and 13 garages, Philip's Avenue, Worcester Park, for Sagos Builders, Ltd., 137 Haling Park Road, Croydon; demolition of two houses at 7 and 9 Robin Hood Lane, and the erection of 45 flats in four three-storey blocks and 45 garages, for Wellwood Estates, Ltd., 2 Sloane Gardens, London, S.W.I; demolition of house at 31 Christchurch Park, Sutton, and the erection of six flats and six garages, for M. J. Gleeson (Contractors), Ltd., London Road, Cheam; demolition at 88 Worcester Road and erection of 24 flats and 22 garages, for New Ideal Homesteads, Ltd., Mead House, South Street, Epsom.

Swansea.—B.C. have approved plans for the rection of old people's bungalows at West Cross.

Cross.

Williton, Som.—R.D.C. propose the erection of williton, Som.—R.D.C. propose the erection of them at Stogursey for workers at the nuclear power station.

Worcester.—City Council recommended to approve the erection of 279 dwellings at Warndon estate, 18 at St. Catherine's Vale. 14 at Tollodine estate, 10 at Powell's Row, eight at Dines Green estate and three at Little Park Street, during the year; provision of caretaker's house at Gorse Hill School. Estimated cost £2,250.

PLAYING FIELDS, PARKS, ETC.

Bermondsey. — L.C.C. approved the laying out of the first part of the Bermondsey riverside open space. Estimated cost £4.475.

Hereford. — City Council recommended to approve draft layout plan for a cinder track dressing room accommodation, four football pitches and two cricket squares at the Racecourse. pitches and Racecourse. Huntingdon.

Huntingdon. — B.C. recommended to approve, in principle, and submit to County Planning Officer for approval, scheme for the layout of Hartford Road Fields.

Leamington Spa, War.—B.C. recommended to approve, in principle, scheme for landscaping the area surrounding the multi-storey flats at Masons Avenue. Estimated cost £1,200.

Lipton Bade, B.C.

£1.200.
Luton, Beds.—B.C. to apply for sanction to borrow £4.750 for the development of permanent allotment sites at Stockingstone Road and Winsdon Hills.

Salford, Lancs.—City Council recommended to apply for sanction to borrow £3,500 for development of land in Church Road and Duke Street as a playground extension to the Ascension C.E. School, and £7.372 for improvement of Littleton Road allotments site.

improvement of Littleton Road allotments site.

Swindon, Wilts.—B.C. recommended to approve scheme for the completion of the layout of Queen's Park. Estimated cost £26,600.

ROADS, BRIDGES AND SITE WORKS

Barnes, Surrey. — B.C. have approved, in inciple, the widening of Upper Richmond odd West, between Portman Avenue and

Barnes, Surrey. — B.C. have approved, in principle, the widening of Upper Richmond Road West, between Portman Avenue and Priests Bridge.

Barrow-in-Furness, Lancs. — B.C. recommended, subject to M.T. approval, to invite tenders from selected contractors, for construction of the Michaelson Road high level bridge, Mott, Hay and Anderson, 9 Iddesleigh House, Caxton Street, Westminster, S.W.1, are the consulting engineers.

the consulting engineers.

Blandford, Dorset.— B.C. recommended to approve sketch plans for the construction of a car park adjacent to Church Lane.

Clackmannanshire. — C.C. have appointed Blyth and Blyth, 135 George Street, Edinburgh, 2, consulting engineers for the construction of Devonside Bridge, Tillicoultry.

Colne, Lancs.—Borough Engineer to prepare plans, etc., for making-up Sefton Street and Ellesmere Avenue.

Lambeth.—L.C.C. to employ private consultants to prepare schemes and estimates for the erection of three pedestrian bridges in connection with the development of the South Bank area.

connection with the development of the South Bank area.

Liverpool.—City Council recommended to apply for sanction to borrow £1,162 for paving of footways in front of new buildings in Birch-field Street, Langsdale Street, Great Homer Street Nursery Street, Bolton Street, Hilbre Street and Skelhorne Street.

Luton, Beds.—B.C. to invite tenders for resurfacing with tarmacadam the forecourts of garage sites at various housing estates.

Maidstone, Kent.—B.C. recommended to submit to Ministry, for approval, scheme for the improvement of the junction at Poplar Grove, London Road and Grace Avenue; making-up and laying out as a permanent car park the temporary car park at Upper Stone Street; invite tenders for the construction of the Riverside Walk.

Peterborough.—City Council recommended to approve, in principle, scheme for the extension of Eastfield Cemetery. Estimated cost £2,300.

Plymouth.—City Council recommended to

to approve, in principle, scheme for the extension of Eastfield Cemetery. Estimated cost £2.300.

Plymouth.—City Council recommended to submit to M.T. for approval and grant aid schemes for the construction of the Western Approach Road from (a) Frankfort Gate to Harwell Street Ope and (b) Harwell Street Ope to Cambridge Street, and for the extension of Notte Street from Princess Square to Athenaeum Street, estimated cost £10.355, £34,412 and £23,300, respectively; approve in principle scheme for the provision of a bus bay at Mutley Plain/Alexandra Road junction, £2,300; invite tenders for the making-up of Glenholt Road and Holtwod Road, £27,748.

Pontypool, Mon.—U.D.C. have approved scheme for the construction of roads and sewers to serve 300 houses at Trevethin.

St. Albans, Herts.—City Council recommended to apply for sanction to borrow £19,755 for the making-up of Mount Drive and The Rise; invite tenders for the construction of two car parks, one at the rear of The Grange and one at Wellington Court. Estimated cost £4,100 and £2,200, respectively.

Sheffield.—City Engineer to be authorised to carry out provision of bus terminus in Morton Lane and Construction of a footpath in Morton Lane, between Chesterfield Road South and Dyche Lane, estimated cost £2,800, and to resurface and improve Abbey Lane, £29,740.

Stockport, Ches.—Ministry have approved plans for the completion of footpaths. verges

£2.800, and to resurface and improve Abbey Lane, £29,740.

Stockport, Ches. — Ministry have approved plans for the completion of footpaths, verges and final surfacing of carriageways at Hillcrest Road estate, for B.C. Estimated cost £4,881.

B.C. recommended to approve plans for the making-up of the St. James Road group. Estimated cost £12,980.

Stoke-on-Trent, Staffs.—City Council recommended to prepare scheme for the reconstruction of the bridge carrying Millrise Road, Milton, over the River Trent; approve plans for making-up Palmers Green (part) and and Upper Hollings Street (part) and Carling Grove, Fenton, and Stross Avenue, Chell.

Sunbury-on-Thames, Middx.—C.C. recommended to approve the construction of a roundabout at the junction of Walton Bridge, Russell and Fordbridge Roads. Estimated cost £24,060.

Swindon, Wilts.—B.C. recommended to apply for sanction to borrow £16,400 for the provision of access road, severs and ancillary works at Parsonage Farm.

Weymouth, Dorset.—B.C. recommended to approve plans for the making-up of Grafton

Weymouth, Dorset.—B.C. recommended to approve plans for the making-up of Grafton Avenue and Bryants Lane.
Worcester.—City Council recommended to approve plan for the future widening of part of London Road and Whittington Road.

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Accrington, Lancs.—Borough Engineer to be instructed to prepare a revised scheme for remaining part of extensions at the Huncoat sewage disposal works.

Bideford, Devon.—B.C. recommended to prepare scheme for dealing with storm water in the Furzebeam Terrace area.

Bodmin, Corn.—Ministry have approved B.C.'s sewerage and sewage disposal scheme for Westheath. Detailed drawings are to be prepared.

for Westileating prepared.

Ilkeston, Derbys.—B.C. recommended to approve in principle, submission to Ministry for approval, scheme for the reconstruction of the Eastern Outfall Sewer. Estimated cost

Leeds.—City Council recommended to ap-y for sanction to borrow £6,500 for con-

struction of a 12in. sewer for combined drainage and service road in the Shannon Street light industrial area; to approve construction of a 15in. sewer from Mavis Avenue to a point on the east side of Otley Old Road. estimated cost £8,600, construction of a short length of sewer with storm water overflow in

estimated cost £8,600, construction of a short length of sewer with storm water overflow in Adel Valley at Adel Bridge, £5,000.

Liverpool.—City Council recommended to apply for sanction to borrow £1,502 for sewer reconstruction works in Cuckoo Lane.

Maidstone, Kent.—B.C. recommended to proceed with construction of a sewer at 24-3% Mill Street. Estimated cost £1,100.

Mill Street. Estimated cost £1,100.

Peterborough.—City Council recommended to approve in principle and submit to Ministry for approval, schemes for construction of foul water drainage for main area of Westwood and provision of surface water drainage for area between Thorpe Road and River Nene. Estimated cost £183,500 and £32,000 respectively.

Stoke-on-Trent, Staffs.—City Council recommended to prepare scheme for the extension of the Bucknall to Adderley Green sewer.

STREET LIGHTING

Bideford, Devon.—B.C. recommended to prepare scheme for general improvements to street lighting in the borough.

Bristol.—City Council recommended to approve scheme for supplementary illumination of pedestrian crossings. Estimated cost £1,800.

Croydon, Surrey.—B.C. recommended to approve programme of street lighting improvements, stage five. Estimated cost £92,000.

Leatherhead, Surrey.—U.D.C. propose the installation of sodium lighting from the Epsom boundary to The Street. Estimated cost £4,100.

1.100.
Oxford.—City Council recommended to apply for sanction to borrow £11,295 for the rovision of improved lighting in various streets uring this year.
Stoke-on-Trent, Staffs.—City Council recom-

mended to approve scheme for the conversion of street lighting on the Winchester-Preston trunk road between Ash Green and Hanford.

West Hartlepool, Dur.—B.C. have approved the spending of £9,265 during the coming financial year, on street lighting improvements.

CONTRACTS

Full details of the Contracts marked will be found in our Advertisement Columns.

BUILDING AND DECORATING
(See also Housing Schemes)

(See also Housing Schemes)

*Aberdare, Glam.—Repairs to fire places and stacks, for U.D.C. Deposit £1. Tenders by Feb. 26.

Aberdeen.—Conversion into flatted dwellings of existing property at the following, for City Council: (1) 10 Grampian Road, Torry—five dwellings; (2) 54 Walker Road, Torry—five dwellings; (3) 6 Wallfield Place—four dwellings; (3) 6 Wallfield Place—four dwellings, comprising the following works: (a) mason, drainage and slater, etc.; (b) carpenter, joiner and ironmonger; (c) plumber; (d) lath and plaster; (e) electrical; (f) painter and glazier. Applications, in writing, to the City Architect, 11 Broad Street, Aberdeen. Plans also seen at the offices of Leo Durnin, 252 Union Street, Aberdeen. Tenders by (1) Feb. 12 and (2) and (3) Feb. 19.

Aireborough, Yorks.—External painting of Micklefield House and Nunroyd House, for U.D.C. Applications to the Surveyor, Micklefield House, Rawdon, Leeds. Deposit £1 is. Tenders by March 7.

*Amersham, Bucks.—External redecoration of houses, for R.D.C. Apply by Feb. 29.

Ashford, Kent.—Following, for U.D.C.: (a) Reroofing of Council houses; (d) fencing to Council houses. Documents from the Surveyor, 1 Elwick Road, Ashford. Tenders by March 5.

Aylesbury, Bucks.—External painting to council houses in the following villages, for

by March 5.

Aylesbury, Eucks.—External painting to council houses in the following villages, for R.D.C.: Aston Clinton, Bierton, Brill, Buckland Bishopstone, Chearsley, Chilton, Cuddington. Dinton, Grendon Underwood, Haddenham, Halton, Hardwick, Kingswood, Long Crendon, Quainton. Stoke Mandeville, Weedon, Wendover, Weston Turville, and Upper Winchendon. Documents from Raymond C. White. Council's architect, 4 Temple Square, Aylesbury. Contractors may tender for the whole or part of the works. Tenders by Feb. 15.

Ballymoney, Antrim.—Alterations and addi-

or part of the works. Tenders by Feb. 15.

Ballymoney, Antrim.—Alterations and additions to the rectory at St. Patrick's Parish Church, for The Select Vestry of St. Patrick's Parish Church. Section 1—building work—including the redevelopment of part of the ground floor to form new kitchens and garages, etc., together with general repairs in accordance with plans and specifications.

Section 2—heating and plumbing—including a complete low pressure hot water heating system and new plumbing works in accordance with plans and specification. Section 3—electrical wiring—including complete rewiring of existing rectory, involving electric lighting and socket outlets in accordance with plans and specification. Documents from Thomas T. Houston and Co., architects, 26 College Gardens, Belfast, 9. Deposit £3 3s. per section. Tenders by Feb. 17.

Banbury, Oxon.—Construction of concrete bases for 27 lock-up garages together with two brick-built stores, screen walls and garden at The Fairway, for B.C. Documents from the Engineer and Surveyor, Muncipal Buildings. Marlborough Road, Banbury. Deposit £2 2s. Tenders by March 4.

Barnet, Herts.—Installation of concrete footpaths, showers and other works at the Council's Sports Pavilion, Grosvenor Avenue, Barnet, for U.D.C. Documents from Engineer and Surveyor, Ravenscroft House, Wood Street, Barnet. Tenders by Feb. 20.

Birmingham.—General repairs to the following properties, for City Council: 164-198 Heath Street and 5. 7. Tudor Street—22 houses; 234, 236, 248, 272-276 Heath Street and rear—25 houses; 123-139 Winson Street and rear—25 houses; 123-139 Winson Street and rear—25 houses; 123-139 Winson Street and rear—25 houses; Dansel, Bush House, Broad Street, Birmingham, I. Deposit £2 2s. each contract. Tenders by March 7.

Bridge-Blean, Kent.—Following works as separate contracts, for R.D.C.: (1) External painting of 12 Arcon prefabricated bungalows, Woodside Avenue, Chartham; (2) external painting of 87 Council houses as follows (contractors may tender for one or all of groups (a) (b) and (c)—(a) Adisham six, Bridge eight Littlebourne 16, (b) Blean 27, Harbledown, six, Chartham post-war estates, 17. Documents from the Engineer and Surveyor, Council Offices, 41 Old Dover Road, Canterbury; (4) replacement of kitcheners by open fireplaces with back boilers at Council houses and eight shops in Derwent Road, Tennyson Road, Lake Avenue and Surveyor, Borough Office

Offices. Bury St. Edmunds. Tenders by Feb. 24.
Cardiff.—Construction of the proposed grammar school for boys at Fairwater, for City Council. Documents from the Architect, 12 Park Place, Cardiff. Deposit £2 2s., cheques payable to Corporation. Tenders by March 15.
Cheltenham. Glos.—Following, for R.D.C.: Provision of water closets, hot water systems, etc., at 1, 2, 4, 5, 7, 8 and 10 Shakespeare Cottages, North Road, The Reddings, Badgeworth, and the connection of the dwellings to the main drainage system. Documents from the Surveyor, 20 Imperial Square, Cheltenham. Tenders by Feb. 19.

system. Documents from the Surveyor, 20 Imperial Square, Cheltenham. Tenders by Feb. 19.

Conway, Caerns.—Erection of a block of conveniences at the Morfa Camping Ground, for B.C. The building is to be approximately 1.800 sq. ft. in floor area and will incorporate 60 w.c. cubicles, two sets of urinal stalls, 13 lavatory basins and stores. Documents from the Borough Engineer, Bodlandeb. Conway. Deposit £3 3s. Tenders by Feb. 18.

Dagenham, Essex.—Following for B.C.: (1) Metal casement windows; (2) reinforced concrete floors at the Limbourne Avenue estate. Documents from the Borough Surveyor, Civic Centre, Dagenham. Tenders by March 5.

Devonshire.—Erection of police station and two houses, for C.C. Applications to the Architect, 97, Heavitree Road, Exeter, by Feb. 20.

Devonshire.—Erection of branch library at Paignton, for C.C. Documents from County Architect, 97, Heavitree Road, Exeter, Deposit £3 3s., cheques pavable to C.C.

Docking, Norfolk.—Carrying out sanitary improvements to 10 houses at Mainway. Holme-next-the-Sea, and the construction of a small sewage disposal works, for R.D.C. Documents from G. E. Gibson, housing

officer, Council Offices, Docking, King's Lynn. Deposit £1 ls. Tenders by Feb, 17.

Edinburgh.—Following maintenance works at Gogarburn Mental Deficiency Institution, for Board of Management: Blacksmith, boiler scaling, carpenter and joiner, chimmey sweeping, electrical services, general engineering, glazing, steam heating and hot water supply services, mason and brickwork, plaster and cement work, plumber and slater work. Documents from the Secretary and Treasurer. Gogarburn Institution, Corstorphine, Edinburgh, 12. Tenders by Feb. 23.

Esher, Surrey.—External repainting of 20 houses, six bungalows and 12 flats at Grange Road and Brende Gardens. West Molesey. contract 297, for U.D.C. Documents from the Engineer and Surveyor, Council Offices, Esher. Deposit £1 ls. Tenders by March 15.

Essex.—Erection of first stage of Stifford Clavs William Edwards Boys' Secondary School, for C.C. The building will be part two-storey and part single-storey in brick and steel-framed construction. Estimated cost £106.000. Aplications to H. Conolly. architect, County Hall. Chelmsford. by Feb. 13.

Flintshire.—External painting of following. for C.C.: (a) Old Hall scheme, Hanmer (11 holdings): (b) Mulsford scheme, Bancor-on-Dee (five holdings). Documents from Maysmor W. Jones, county land agent, 16 Wrexham Street, Mold. Tenders by March 7.

Hammersmith.—Following works for B.C.: Repair, decoration and improvement in private houses, both occupied and emoty, the cost of such works varying between £500 and £3.000. Applications to Engineer and Surveyor. Town Hall Hammersmith, London, W.6.

"Hastings, Sussex.—Erection of first instalment at college of further education, for B.C. Denosit £5 5s. Tenders by March 7.

Havant and Waterloo. Hants.—Supply and erection at the town hall, Havant, of approximately 6000 so. ft. of prefabricated single-storey office accommodation with ancillary works thereto, for U.D.C. Applications to Engineer and Surveyor. Comments from Engineer and Surveyor Red House, Leatherhead. Tenders by March 1.

Hord, Esse

Feb. 24.

Lincoln.—Erection of a three class instalment, at Ruskington New Mixed County Primary School, for C.C. Applications to the County Architect. County Offices, Sleaford, by Feb. 25. Tenders by March 15.

Manchester.—Erection of a Technical High School for Girls at Harburhey, for City Council. Documents from the City Architect, P.O. Box 488, Town Hall, Manchester. Tenders by Feb. 23.

*Manchester.—Erection of five shops and maisonnettes, for City Council. Tenders by Feb. 29.

Montgomeryshire.—Erection of a new gram-

*Manchester.—Erection of the shows and maisonnettes, for City Council. Tenders by Feb. 29.

Montgomeryshire.—Erection of a new grammar school adiacent to the existing modern secondary school at Welshpool. for Education Authority. Documents from J. A. Davies. director of education, County Offices, Newtown, Tenders by Feb. 29.

*Newark-on-Trent, Notts.— Extension of attested cattle market, for B.C. Deposit £2 2s. Tenders by March 4.

Northfleet, Kent.—Exterior painting of 250 houses and bungalows on the Wombwell Park estate, for U.D.C.: Contract 1—132 houses. 12 bungalows; contract 2—100 houses. six bungalows. Documents from the Housing Manager, Housing Department, Town Hall. Northfleet. Tenders by Feb. 23.

North Riding.—Erection of Marske County Yunior School near Redear, for E.C. Documents from J. H. Napper and Partners, architects, 133 Osborne Road, Newcastle upon Tyne. 2. Plans also seen at the County Hall. Northallerton. Tenders by March 4.

Northwich, Ches.—Supply and erection of 48 precast concrete bus shelters of the enclosed and cantilever type in various parishes for R.D.C. Documents from the Engineer and Surveyor, Whitehall, Hartford, Northwich Deposit £2 2s. Tenders by March 3.

Nottingham.—Following cleaning and painting works, for E.C.: Internal and external—Peverill School, Robins Wood Road, Aspley; Raleigh School, Raleigh Street; Secondary School for Art, 9-11 Waverley Street; The High Pavement School, Gainsford Crescent, Bestwood estate; Whitegate Iunior and Infant Schools, Middlefell Way, Clifton estate. Internal—Claremont School Avenue, Bilborough; Charnwood School kitchen, Famborough Road, Clifton estate; Glapton School kitchen, Glapton Lane, Clifton estate; Walter Halls School kitchen. Querneby Road, Mapperley; Westbury School kitchen, Lortas Road, New Basford; Padstow School kitchen, Padstow Road, Bestwood. Documents from Education Office (Sites and Buildings Department), Exchange Buildings, Smithy Row, Nottingham. Deposit £1 each contract. Tenders by March 7.

Pembrokeshire.—Erection of a new three-bay fire station with ancillary buildings and one fireman's house in High Street, Pembroke Dock, for C.C. The building will be mainly of two storeys with a single-storey appliance room, drill and hose drying tower and certain workshops. The general construction will be traditional with load bearing walls, concrete roofs, etc. Applications to Lt.-Col. Walter Barrett, architect, County Offices, Haverfordwest, by Feb. 20. Denosit £2 2s.

Pontypool, Mon.—Erection of a branch library at Morrison Road, Sandfields, Aberavon, for B.C. Documents from G.V.

Feb. 29.

Port Talbot, Glam.—Erection of a branch library at Morrison Road, Sandfields, Aberavon, for B.C. Documents from G. V. Griffiths, borough engineer, Muncipal Buildings. Port Talbot. Deposit £2 2s. Tenders by Feb. 22.

Rufland.—Alterations and additions to provide improved sanitary and cloakroom.

Griffiths, borough engineer, Muncipal Buildings. Port Talbot. Deposit £2 2s. Tenders by Feb. 22.

Rutland.—Alterations and additions to provide improved sanitary and cloakroom accommodation at Barrowden and Wing Primary Schools, for C.C. Documents from the Architect and Planning Officer, Catmose, Oakham, Rutland. Tenders by Feb. 29.

*Southampton.—Erection of annexe, Weston Park School, for B.C. Apply in writing by Feb. 20. Tenders by March 21.

Stourbridge, Worcs.—Erection of a brickbuilt navilion and public conveniences at South Road plaving fields, for B.C. Documents from H. W. Morris, engineer and surveyor, Council House, Stourbridge. Deposit £2 2s. Tenders by March 4.

Surbiton. Surrey.—Erection of branch library and community centre, Hook, for B.C. The contract comorises the construction of a light steel-framed library and assembly hall and various ancillary rooms of load bearing construction. Applications, giving details of recent similar work executed, to Iohn H. A. Crundell, town clerk. Council Offices, Surbiton, Surrey.—Construction of a light steel-frame library and assembly hall and various ancillary rooms of load-bearing construction at Hook, for B.C. Documents from Iohn H. A. Crundell, town clerk, Council Offices, Surbiton, by Feb. 16. Tenders by March 25.

Swansea.—Erection of block of shops and maisonnettes at Port Tennant Road, for

March 25, Swansea.—Erection of block of shops and maisonnettes at Port Tennant Road, for B.C. Applications to the Borough Architect, The Guildhall, Swansea, by Feb. 26. Deposit

The Guildhall, Swansea, by Feb. 26. Deposit £2.

Tyrone.—Following. for E.C.: (1) Lisnaweary P.S. (near Augher)—erection of extensions; (2) Dyan P.S. (near Caledon)—erection of fencine. Applications to the Chief Education Officer. Education Offices. Omagh. Tenders by Feb. 16.

*Ulverston. Lancs.—Provision of new Council offices, for R.D.C. Tenders by Feb. 18.

Ventnor, I. of W.—Painting of part of the sub-structure of the Royal Victoria Pier. for U.D.C. Documents from Basil L. Phelos, chartered surveyor and architect, 85 High Street. Shanklin, I. of W.

Wandsworth.—Rebuilding the church of England chapel at Putney Vale Cemetery, for B.C. Applications to J. Noel Martin, town clerk. Municipal Buildings, Wandsworth, London S.W.18. by March 9.

Wellington, Salon.—External painting of following, for R.D.C.: Schedule (6) 52 houses at Hadley: (7) 44 houses at Hadley: (22) 160 houses at Donnington; (35) 36 houses at Donnington; (42) 107 houses at Ketley. Applications to the Housing Manager, Estate Offices. Donnington, Wellington. Tenders by Feb. 22.

West Fife.—Following for the year commencing April 1, 1960, for Hospitals Board of Management: (1) Building trades—(a) mason and brickwork; (b) carpenter and joiner; (c) slater and tiler; (d) plaster and cement; (e) plumber and gasfitter; (f) window cleaning; (g) chimney sweeping; (2) engineering services—(a) electrical work; (b) steam, condense, heating and gas; (e) domestic hot water. Documents from W. M. Muir, secretary and treasurer. 16 Comely Park, Dunfermline. Tenders by Feb. 22.

West Riding.—Alterations to provide dental and minor ailments clinic, at the former divisional education office, Richardshaw Lane, Pudsey, for C.C. Documents from the Divisional Architect, Salisbury Buildings. Albert Street. Harrogate. Tenders by Feb. 22.

West Riding.—Internal and external painting of schools in Colne Valley, Denby Dale, Holmfirth, Meltham. Kirkburton areas during 1960, for C.C. Applications to A. Beardsell, divisional education officer, 35 Kirkgate, Huddersfield. Tenders by Feb. 20.

West Riding.—Internal painting at Barnsley Divisional Police Headquarters, for C.C. Applications to the Divisional Architect. Bishongarth. Westfield Road, Wakefield, by Feb. 19. Tenders by March 4.

Withernsea. Yorks.—Covering in of sun lounge, as follows, for U.D.C.: (1) (a) Steelwork and erection, (b) ashestos roof and roof lights; (2) brickwork: (3) joinery, including windows, lining and sheeting rails: (4) plumbing, glazing; (5) electric lighting; (6) painting. Documents from the Clerk of the Council. Municipal Buildings, 243 Oneen Street, Withernsea. Tenders by Feb. 19.

Witnernsea. Tenders by Feb. 19.

W

Tenders by Feb. 23.

Worcester.—Reconstruction and re-equipping of the main kitchen block at Hilborough. Tallow Hill. Worcester, for City Council. Documents from City Engineer and Surveyor, 22 Bridge Street. Worcester. Deposit £2 2s. Tenders by March 7.

Workson, Notts.—Demolition of seven cottages and the erection of six traditional type old neonle's bungalows at Hieh Street. Blyth, for R.D.C. Documents from B. D. Thompson, FR.I.B.A. 102 Bridge Street, Workson, Deposit 63 3s., by cheque payable to Council. Tenders by Feb. 24.

CLOTHING AND TEXTILES

Birkenhead.—Supply of uniform clothing, caps, mackintoshes and dust coats, for B.C. Documents from the Water Engineer. 601 Borough Road, Birkenhead. Tenders by

Borough Road, Birkenhead. Tenders by March 7.

Lincoln.—Supply of following, for City Council: (a) Uniform clothing for members of the city police force and the fire brigade; (b) uniform clothing for the transport and other departments of the Corporation. Documents from J. Harper Smith, town clerk. Town Clerk's Office, Lincoln. Tenders by Feb. 26.

Renfrew and Bute.—Supply of uniform clothing for the police force of the Renfrew and Bute Constabulary, for Joint Police Committee, i.e., waterproof coats, garberdine coats. iackets and trousers; shirts and collars: fies: leather glowes: caps: warm linings; policewomen's uniform and police cadets'. Documents from Robert Urauhart. clerk County Buildings, Paisley. Tenders by Feb. 19.

Sheffield.—Supply of articles of police clothing for the city of Sheffield police. Documents from The Chief Constable. P.O. Box 14, Castle Green, Sheffield, 3. Tenders by Feb. 26.

DEMOLITION

Kerrier, Corn.—Demolition to slab level of 22 hutments comprising 34 units of accommodation at Trelanvean. for R.D.C. Documents from W. J. Thomas, clerk of the Council, Council Offices. The Willows, Helston. Denosit £1 Is. Tenders by March 5. Luton, Beds.—Demolition of a small seewage works at Hyde Road. Caddington, for R.D.C. Documents from the Engineer and Surveyor. 48 Bute Street, Luton. Tenders by March 19 Newoort, I. of W.—Demolition of 69-75 Hunnyhill. for B.C. Documents from the office of the Borough Engineer. 39 Quay Street. Newport. Tenders by Feb. 22.

Northallerton, Yorks.—Pulling down and clearing of site in connection with 36 houses and other buildings forming part of East Road clearance area. for U.D.C. Documents from P. Hartley, clerk of the Council, 72 High Street, Northallerton. Tenders by Feb. 20.

Fig. 20.

Sunderland.—Demolition of 99 Low Street, for B.C.. Documents from Borough Engineer, 27 Fawcett Street, Sunderland. Deposit £1 1s.,

cheques payable to Corporation. Tenders by Feb. 16.

Tottenham, Middx.—Period contract for all redevelopment demolition works in the borough, for B.C. Documents from the Borough Engineer, Town Hall, Tottenham. N.15. Deposit £2. Tenders by Feb. 24.

ELECTRICAL

Bishop's Stortford, Herts.—Electrical wiring work in 28 flats and a communal block shortly to be erected, for U.D.C. Documents from the Surveyor, Council House, Causeway, Bishop's Stortford. Tenders by March 7.

Bishop's Stortford. Tenders by March 7.

West Lothian.—Repair and maintenance of electrical installations and equipment (including minor extensions) at the hospitals in the group all situated in West Lothian, for the year commencing April 1, 1960, for Board of Management. Documents from the Group Secretary and Treasurer. Board of Management, Bangour General Hospital, Broxburn. Tenders by Feb. 27.

West Riding.—Installation of a fire alarm system at the hostel for the aged, Hillworth Lodge, Keighley, for C.C. Documents from the Divisional Architect, Salisbury Buildings, Albert Street, Harrogate. Tenders by Feb. 29.

Birmingham.—Supply, delivery and complete erection of a fence at the refuse disposal and salvage works, Brookvale Road, Witton, for City Council. Documents from the General Manager. Salvage Department. Civic Centre, Broad Street, Birmingham, I. Tenders by Feb. 26.

Bristol.—Supply and erection of 175 lin. yd. of heavy mild steel fencing, 8ft. high, at Henleaze Lake, for City Council. Documents from City Engineer and Planning Officer, Cabot House, Deanery Road, Bristol, 1. Tenders by Feb. 19.

*Buckinghamshire.—Fencing works, for B.C. Apply by Feb. 20.

*Buckinghamshire.—Fencing works, for B.C. Apply by Feb. 20.

Liverpool. — Supply and fixing of approximately 370 lin. yd. of 5ft. bitumenised chain link fencing, including five gates, on concrete posts at Long Lane-Higher Lane. for City Council. Documents from the City Architect and Director of Housing. Blackburn Chambers. Dale Street, Liverpool. 2. Tenders by Feb. 17.

*Manchester.—Supply of pedestrian guard rails, for City Council. Tenders by Feb. 29.

Swanzes — Enging at Clase and Penlan

Swansea. — Fencing at Clase and Penlan reservoirs and Pottery Bridge Depot, for B.C. Work provides for the dismantling of existing

Work provides for the dismantling of existing fencing and the supply and erection of concrete posts clad with chain link. Documents from the Borough Water Engineer and Manager, The Guildhall, Swansea. Tenders by Feb. 27.

Woking, Surrey.—Erection of approximately 1.400yd, chain link fencing at Old Woking and Monument Bridge industrial sites, for U.D.C. Documents, from Engineer and Surveyor, Council Offices, Guildford Road, Woking, Deposit £2 %. Tenders by Feb. 22.

GAS AND WATER SUPPLY

Angus.—Following, for C.C.: (a) Lintrathen water supply, contract 7, 100,000 gallons reinforced concrete tank; 20 miles 7in., 6in., 4in., 3in., and 2in. asbestos-cement water mains; (b) Lundic/Auchterhouse/Tealing water supply, contract 3, 25 miles 6in., 4in., 3in., and 2in. asbestos-cement water mains. Applications to County Engineer, County Buildings, Forfar, by Feb. 29.

County Engineer, County Buildings, Foriar, by Feb. 29.

Ballymoney, Antrim.—Construction of a filter house, etc.. situated in the Townland of Corkey Middle, 12 miles east of Ballymoney, contract 8a, for R.D.C. The works comprise: Two settling tanks of approx. 20,000 gallons capacity; four filters each 20ft. x 10ft. x 11ft. deep; filter house on two floors, ground floor approx. 2,400 super. ft. Documents from Waterhouse and Rounthwaite. consulting engineers, Howard Srteet, Belfast. Deposit £5 5s. Tenders by March 3.

Barrow-in-Furness. Lancs.—Construction and testing of a 30in. diameter borehole at Leith Flat Brow, for B.C. Documents from the Water Engineer, 102a Duke Street, Barrow-in-Furness. Deposit £2 2s. Tenders by Feb. 22.

the Wate. in-Furness. 22,

reb. 22.

Bridlington, Yorks.—Supply and installation of two sets of duplicate pumping plant of 25,000 and 35,000 g.p.h. electrically operated and automatically controlled, for B.C. Documents from the Water Engineer and Manager. 11 Marton Road, Bridlington. Deposit £2 2s. Careliff.—Landachd and Ca

Tenders by March 10.

Cardiff.—Llandesfedd water scheme, section B. for City Council, as follows: Sub-contract B.3 (1) 36in., 30in., and 24in. diameter steel pipes and specials witht concrete linings and welded joints; (2) 24in. diameter spun-iron pipes with Tyton joints and cast-iron specials: (3) 60in., 42in., and 30in. diameter prestressed concrete pipes and specials. Documents from the Engineer, Cardiff Corporation Waterworks,

Resident Engineer's Office, Sluvad, Panteg, near Pontypool. Deposit £2 2s. each contract, cheques payable to Corporation. Tenders by Feb. 22.

Feb. 22.
Cardiff.—Construction of reservoir at Leckwith, for City Council. Deposit £2 2s., cheques payable to Corporation. Tenders by

March 8.

Chatham, Kent.—Mainlaying, contract 126. for Medway Water Board. 10in. main. Berengrave Lane to Gore pumping station. Laying at Gillingham, Kent, approx. 3,200yd. of 10in. dia. spun-iron water main, with Tyton flexible joints, together with ancillary work. Documents from the Board's Engineer and Manager. 25 Railway Street, Chatham. Deposit 53. Tenders by March 8.

Chatham, Kent.—Mainlaying, contract 134.

£3. Tenders by March 8.

Chatham, Kent.—Mainlaying, contract 134.
for Medway Water Board. 21in. main
Singlewell to Prince of Orange. Laying at
Gravesend, Kent, approx. 2,400yd. of 21in. dia.
spun-iron water main, with Tyton flexible
joints, together with ancillary work. Documents from the Board's Engineer and Manager,
25 Railway Street. Chatham. Deposit £3.
Tenders by March 8.

Denwade Norfolk — Provision tranching for

Penders by March 8.

Depwade, Norfolk.—Provision, trenching for laying and jointing, etc., of about 3 miles of 6in. diameter spun-iron mains in the parishes of Dickleburgh and Redenhall-with-Harleston. for R.D.C. Documents from A. P. I. Cotterell and Son, engineers, 54 Victoria Street, London. S.W.I. Deposit £3 3s. Tenders by Feb. 29.

*Dursley, Glos.—Comprehensive scheme of water supply, contract 4, for R.D.C. Apply by Feb. 17.

Freebridse Lynn Norfolk.

water supply, contract 4, for R.D.C. Apply by Feb. 17.

Freebridge Lynn, Norfolk.—Proposed water scheme, parish of Westacre, for R.D.C., laying of approximately 3,000vd, of 3in, spun-iron mains and ancillaries. Documents from W. R. Watkins, the surveyor, Council Offices, 11 King Street. King's Lynn. Deposit £2. Tenders by March 9.

Fylde, Lancs.—Laying of 5.3 miles 30in. diameter prestressed concrete and 0.6 mile 30in. diameter steel main, together with ancillary works, for Water Board. Documents from the Engineer to the Board. Sefton Street, Blackpool. Tenders by April 19.

Glendale, Northumb.—Laying and part supplying approx. 80yd. of a 3in. water main at Well Dene, Wooler, for R.D.C. Documents from A. R. Field, surveyor, Council Offices, Wooler. Tenders by Feb. 29.

Inverness-shire. — Construction of small stream intake, combined filter and clear water tank, and supply and laying out of about one mile of 2in. dia. ac. piping, at Ardvasar, Skye, for C.C. Documents from the County Water Engineer, County Buildings, Inverness. A site meeting will be held on Feb. 16, starting from Ardvasar Hotel at 11 a.m. Tenders by March 7.

Kerrier, Corn.—Laying of approx. 160yd. of

March 7.
Kerrier, Corn.—Laying of approx. 160yd. of 10in. spun-iron water main through the housing estate at Mabe, for R.D.C. Documents from W. I. Thomas. clerk of the Council, Council Offices, The Willows, Helston. Deposit £1 1s. Tenders by Feb. 27.

£1 ls. Tenders by Feb. 27.

Lanarkshire.—Laying of steel pipelines with Viking Johnson couplings, for Daer Water Board. The approximate lengths and locations are as follows: Contract 4. Daer treatment works to Elvanfoot. 5\footnote{1} miles of 54in. diameter pipeline; contract 5. Elvanfoot to Abington. 5\footnote{1} miles of 54in. diameter pipeline; contract 6. Douglas Moor tank to Brocketsbrae, eight miles of 42in. diameter pipeline. Documents from D. W. Buchan, County water engineer. 23 Beckford Street. Hamilton. Deposit £5. Tenders by March 4.

Launceston. Corn.—Bathpool water scheme.

Tenders by March 4.

Launceston. Corn.—Bathpool water scheme. for R.D.C.: Supplying and laying of approx. 2,600yd. of 2in. dia. asbestos-cement pipes and the construction of a 15,000-gallon service reservoir. Documents from G. L. Davey, clerk of the Council, Council Offices, 20 Western Road, Launceton. Deposit £3 3s. Tenders by Feb. 26.

*Liverpool, Lancs.—Laying steel main, River Dee supply, contract 8, 9 and 10, for City Council. Deposit £5 each. Tenders by April 4.

Council. Deposit £5 each. Tenders by April 4.

Liverpool.—Laying 60in. diameter steel main and ancillary work, as follows, for City Council: (a) (Contract 8) Huntington to Barrow section, seven miles of main; (b) (9) Barrow to Frodsham section, six miles of main: (c) (10) Frodsham to Norton section. 2½ miles of main with major river and canal crossings. Documents from Water Engineer. 55 Dale Street, Liverpool, 2. Devosit £5 each contract, payable to City Treasurer. Tenders by April 4.

Newry, Armaeth.—Comprehensive water scheme, for R.D.C. Supply, erection and settings to work of suitable pressure filter units and ancillary equipment suitable for a maximum filtration rate of 2,500 g.p.h., at Drumintee. Documents from Nicholas O'Dwyer and Son, consulting engineer. 6 Trevor Hill. Newry. Deposit £5 5s. Tenders by March 9.

Northamptonshire,—Laying following, for Mid-Northamptonshire Water Board, contract 441: 2,200 lin. yd. of 3in. diameter spun-iron pipe at Pipewell, near Kettering; 610 lin. yd. of 4in. and 55yd. of 3in. diameter spun-iron pipe at Thorpe Malsor, near Kettering; 1,120 lin. yd. of 3in. diameter spun-iron pipe at Thorpe Underwood, near Rothwell; 2,120 lin. yd. of 3in. diameter spun-iron pipe at Canons Ashby, near Daventry. Documents from Engineer and Manager, Cliftonville, Northampton. Deposit £2 2s. Tenders by Feb. 19.

Startforth, Yorks.—Providing and laying approximately 2,000 lin. yd. of 3in. diameter asbestos-cement pressure pipes, constructing a 5,000-gallon reservoir, building of spring chambers, etc., at Hunderthwaite, near Barnard Castle, for R.D.C. Documents from Fairbank and Son, consulting engineers, The Gables, 62a Bootham, York. Deposit £3 3s., cheques payable to R.D.C. Tenders by Feb. 24.

*Williton, Som.—Stogursey water supply main replacement, for R.D.C. Deposit £2 2s., cheque. Tenders by Feb. 29.

HEATING AND VENTILATING

HEATING AND VENTILATING

Birkenhead, Ches.—New boiler and alterations to heating installation, Grange Secondary School, for B.C. Documents from the Borough Architect, 3 Conway Street, Birkenhead. Deposit £1 ls. Tenders by Feb. 24.

Harrogate, Yorks.—Reorganisation of the central heating installation at No. 3 District Police Training Centre, Pannal Ash, for Local Authority Committee. Applications to the Divisional Architect, Salisbury Buildings, Albert Street, Harrogate, by Feb. 26. Tenders by March 18.

Hull.—Central heating installation at Wheeler Street School, for City Council. Documents from Andrew Rankine, city architect, Guildhall. Deposit £2, payable to City Treasurer. Tenders by Feb. 17.

*Leeds.—Installation of boiler to Many Gates Hospital, for Regional Hospital Board. Apply by Feb. 17. Deposit £2 2s., cheques payable to the Board. Tenders by March 16.

*Leeds.—Completion of steam ring main and heating to Clayton Hospital, for Regional Hospital Board. Apply by Feb. 17. Deposit £2 2s., cheques payable to the Board. Tenders by March 16.

*Manchester.—Supply and erection of heating, hot water supply and gas installations at Nicholls Secondary School, for City Council. Documents from City Architect, P.O. Box 488. Town Hall, Manchester.—Tenders by March 2.

Omagh.—Low pressure hot water heating, hot and cold water, mains water, and gas installations in new office building, for Ministry of Finance. Documents from Room 103. Law Courts Building, Belfast, 1. Tenders by Feb. 25.

HOUSING SCHEMES

*Barnes, Surrey. — Westfields by March 16.

Barnsley, Yorks. — Contract S.H.4. 100 dwellings, comprising 33 pairs of three-bedroom houses, 10 pairs of two-bedroom houses, and seven pairs of one-bedroom bungalows, at St. Helens estate, for B.C. Documents from the Borough Engineer, Town Hall, Barnsley. Deposit £2 2s. Tenders by Feb. 17.

Barrowford, Lanes. — Following works, for U.D.C.: (a) Approx. 750 lin. ft. pitched and macadam carriageways, together with kerbs, footpaths, foul and surface water sewers; (b) the erection of 24 two-storey flats in four blocks, together with paving and other site works. Documents from the Engineer and Surveyor, Council Offices, Halstead Lane, Barrowford. Deposit £2 2s. each. Tenders by March 4.

Surveyor, Council Offices, Haistead Lane, Barrowford. Deposit £2 2s. each. Tenders by March 4.

Bowland, Yorks. — Erection of Homeville Units, consisting of seven one- and three two-bedroom flats at Waddington, and four one-bedroom flats at Grindleton, for R.D.C. Documents from L. D. Telford, clerk of the Council, Council Offices, 32 Pimlico Road, Clitheroe. Deposit £2 2s., cheques payable to R.D.C. Tenders by Feb. 20.

Bridge-Blean, Kent.—Erection of two pairs of three-bedroom houses, one block of four flats and one block of four bungalows at Hollow Street, Chislet, and the provision of external services within the curtilage of the dwellings, for R.D.C. Documents from the Council Offices, 41 Old Dover Road, Canterbury. Deposit £2 2s., cheques payable to R.D.C. Plans also seen at the office of H. V. Godfrey, architect, 63 Oxford Street, Whitstable. Tenders by March 7.

Chester-le-Street, Dur. — Thirty-four dwellings on West Lane estate, for U.D.C. Documents from the Engineer and Surveyor, Council Chambers, Chester-le-Street. Deposit £5 5s. Tenders by Feb. 25.

Conisbrough, Yorks.—Thirty-one Unity flats, March Gate, for U.D.C. Documents from C. Urch, engineer and surveyor, Council Offices, 5 High Street, Conisbrough, Deposit £2, cheques payable to U.D.C. Tenders by March 2.

Cricklade and Wootton Bassett, Wilts.—
Ten houses and 10 bungalows at Lyneham, for R.D.C., including site and substructure works, drains, water services, fences, finishing carpet to carriageway, and complete making-up of footpaths. Documents from J. C. Grindley, engineer and surveyor, 141, High Street. Wootton Bassett. Deposit £2 2s. Tenders by March 8.

Faringdon, Berks.—Following for R.D.C.: (1) Site preparation works, Longworth; (2) erection of four houses and eight bungalows at Longworth; (3) site preparation works, Faringdon; (4) erection of six houses and twelve bungalows at Faringdon. Documents from the Council's Engineer and Surveyor, Council Offices, Market Place, Faringdon, Deposit £2 2s. Tenders, for whole or parts of work, by Feb. 27.

*Hartlepool, Dur.—Houses, maisonnettes and garages, for B.C. Deposit £2. Tenders by March 7.

Hertford.—Erection of following, for R.D.C.: (a) Little Amwell, eight Rebecca bungalows, Downfield Road; (b) Tewin, 12 x 3 bedroom houses, four bungalows, and 11 garages at Grass Warren, together with some siteworks in each case. Applications to E. A. Williams, clerk, Wallfield Pegs Lane, Hertford, by Feb. 13. Deposit £2 each contract.

Inverness.— Following trades: Mason, carpenter, glazier, roughcast, built-up-roofing, plumber, plaster and electrical works required in connection with one block of 24 flats, four storeys high, at Dunabban Road, for B.C. Documents from the Burgh Architect, 11 High Street, Inverness.— Four houses and 30 single-storey dwellings on the Malpas Road estate, for ILD.C. Documents from the Surgents and source and state, for ILD.C. Documents from the Surgents and source and state, for ILD.C. Documents from the surgents and source and surgents and surgents and surgents and surgents and surgents and sur

High Street, Inverness. Tenders by Feb. 18.

Northwich, Ches.—Four houses and 30 single-storey dwellings on the Malpas Road estate, for U.D.C. Documents from the Engineer and Surveyor, The Council House, Northwich. Tenders by March 7.

*Salford. — Twenty-eight maisonnettes at Oakland Road, for City Council. Deposit £2 2s. Tenders by March 2.

Saltash, Corn.—Twenty two-bedroom houses and 12 garages on the Grenfell Avenue fifth extension housing site, contract 1/1960, for B.C. Documents from A. de Barr, surveyor, Church House, Saltash. Deposit £2 2s. cheque. Tenders by Feb. 29.

South Shields, Dur.—One hundred and twenty houses and 43 garages at Simonside, for B.C. comprising 56 two-bedroom terrace houses, 12 corner type flats, 52 three-bedroom semi-detached houses and 43 garages. Documents from the Borough Engineer, Town Hall, South Shields. Deposit £2 2s. Tenders by March 9.

Taunton, Som.—Forty-two dwellings as follows for B.C. Bichov Hall.

March 9.

Taunton, Som.—Forty-two dwellings as follows, for R.D.C.: Bishops Hull, nine houses and three bungalows (also five garages): Bishops Lydeard, eight houses and eight bungalows; Cheddon Fitzpaine, three bungalows; Ruishton, four bungalows; West Monkton, seven houses. Applications to H. S. W. Stone and Partners, 20 The Crescent, Taunton, by Feb. 13. Deposit £2 2s.

Thetford, Norfolk.—Twenty-two dwellings on the Magdalen Street housing estate, for B.C. Documents from C. L. Lister, architect, Garsett, House, St. Andrew's Hall Plain, Norwich. Tenders by Feb. 29.

Tonbridge, Kent. — Following, for R.D.C.:

wich. Tenders by Feb. 29.

Tonbridge, Kent. — Following, for R.D.C.: (i) Five blocks of four one-bedroom flats at The Grove, Pembury; (ii) two blocks of four one-bedroom flats and one pair of three-bedroom houses at Riding Park, Hildenborough; (iii) one block of four one-bedroom flats and two pairs of three-bedroom houses at Twyford Road, Hadlow. Documents from the Surveyor, 48 Pembury Road, Tonbridge. Tenders by Feb. 22.

Tinton. Staffs. — Twelve flats in two three-

Tipton, Staffs. — Twelve flats in two three-storey blocks in Alexandra Road adjacent to Queens Road, for B.C. Documents from the Housing Architect, Municipal Buildings, Sedgley Road West, Tipton, Deposit £3 3s. Tenders by March 8.

Tenders by March 8.

Towcester, Northants. — Following, for R.D.C.: Contract (1) Towcester—Burcote Road—eight three-bedroom-type houses, together with drainage and site fencing; (2) Blisworth—Connegar Leys—six hree-bedroom-type houses, together with street kerbing, slab paving, etc.; (3) Yardley Gobion—Warren Road—four two-bedroom bungalows, together with foul and surface water drainage; (4) Maidford—New Road—two two-bedroom-type houses, together with drainage, site fencing and tarmacadam paving. Documents from Geo. Berridge, surveyor, 163 Watling Street West, Towcester. Deposit £2 2s, each contract. Tenders by March 7.

Truro, Corn.—Six bungalows and four

Tenders by March 7.

Truro, Corn.—Six bungalows and four houses at St. Agnes, for R.D.C. Applications to J. H. Snellgrove and Partners, quantity surveyors, 47 Coinagehall Street. Helston, by Feb. 16. Deposit £2 2s., cheques payable to R.D.C. Tenders by March 8.

Tynemouth, Northumb.—Two-storey blocks of flats on th following sites, for B.C.: Six blocks, Toll Square; three blocks, Holystone

Gardens; one block, Howdon Road; one block, Verne Road. Documents from the Surveyor, 16 Northumberland Square, North Shields. Deposit £1 1s. Tenders by March 9.

Walsall, Staffs.—Erection of 56 houses, Beechdale estate (contract 1); 64 houses, Beechdale estate (contract 2); 54 houses, Beechdale estate (contract 3); 12 houses, Woodwards Road; 42 houses, Hildicks Bridge, Goscote Lane, for B.C. Documents from M. E. Habershon, engineer and surveyor, Council House, Walsall. Deposit £2 2s. Tenders by Feb. 25.

Habershon, engineer and surveyor, Council House, Walsall. Deposit £2 2s. Tenders by Feb. 25.

West Riding. — Detached bungalow for the caretaker at Sprotborough Richmond Hill Junior and Infants' School, for C.C. Applications to the County Architect, Bishopgarth, Westfield Road, Wakefield, by Feb. 22. Tenders by March 7.

Winchester. — Forty-four dwellings at Winnall Manor estate, contract 6, for City Council. Applications to A. S. Wilson and Partners, quantity surveyors, 8 Storey's Gate, Westminster, S.W.1, by Feb. 11. Deposit £2 2s (cheques payable to Corporation).

MATERIALS AND SUPPLIES

MATERIALS AND SUPPLIES

Audenshaw, Lancs.—Following from April
1, 1960, to March 31, 1961, for U.D.C.: Precast
concrete paving slabs and kerbs, pitch,
creosote oil, gravel, broken stone, river sand,
bituminous macadam and cold asphalt.
Documents from the Engineer and Surveyor,
Council Offices, Ryecroft Hall, Audenshaw.
Tenders by March 2.

Beddington and Wallington, Surrey.—Following, for B.C.: (1) Re-lay slab paving and
ancillary works; (2) carpet and/or reconstruct
macadam footways, and ancillary works, and
bulk supplies of fine cold asphalt; (3) trench
reinstatements in macadam footways, and
ancillary works. Documents from the Borough
Engineer, Town Hall, Wallington.

*Bedfordshire.—Supply of road materials.

Engineer, Town Hall, Wallington.

*Bedfordshire.—Supply of road materials, for C.C. Tenders by March I.

*Billinge-and-Winstanley, Lancs.—Supply of materials, for U.D.C. Tenders by Feb. 20.

Bognor Regis, Sussex.—Following for the period April I. 1960, to March 31, 1961, for U.D.C.: (1) Tar (pressure applied); (2) tarmacadam; (3) ballast, sand, shingle, bricks; (4) cement; (5) brooms (scavenging); (6) concrete paving slabs, kerb, channel and quadrants; (7) plastic deckchair material; (8) motor haulage; (9) motor fuel. Documents from E. B. Willmott, engineer and surveyor, Town Hall, Bognor Regis. Tenders by Feb. 20.

*Bowland, Yorks.—Supply of materials. for

Town Hall, Bognor Regis. Tenders by Feb. 20.

*Bowland, Yorks.—Supply of materials, for R.D.C. Tenders by Feb. 27.

Burgess Hill, Sussex.—Following during the period April 1. 1960, to March 31, 1961, for U.D.C.: Refined tar and bituminous emulsion; salt-glazed ware pipes; tarmacadam (granite, limestone and slag); granite; Portland cement; decorating materials and equipment; precast concrete kerbs, paving slabs and pipes; other miscellaneous items. Documents from the Engineer and Surveyor, Council Offices, 32 Church Road, Burgess Hill. Tenders by Feb. 17.

Church Road, Burgess Hill. Tenders by Feb. 17.

Bury, Lancs. — Following materials during year ending March, 1961, for B.C.: (Form 1) Stone flags, kerbs and setts; (2) rubble stone for pitching, broken stone for ballasting, crushed stone for concrete and quarry sand; (3) creosote, bitumen emulsion and road tar; (4) Portland cement; (5) tarred and bitumen macadam and fine cold asphalt; (6) chippings; (7) concrete flags, kerbs and edgings; (8) earthenware pipes, gullies, etc.; (9) bricks; (10) paraffin oil. Documents from Borough Engineer, Town Hall, Bury. Tenders by Feb. 20.

*Chistehurst and Sidcup, Kent.—Supply of

*Chislehurst and Sidcup, Kent.—Supply of materials, for U.D.C. Tenders by Feb. 29.
*Crompton, Lanes.—Supply of materials, for U.D.C. Tenders by Feb. 26.

"Crompton, Lanes.—Supply of materials, for U.D.C. Tenders by Feb. 26.

Darlaston, Staffs.—Following for the year ending March 31, 1961, for U.D.C.: (1) Salt: (2) precast concrete kerbs and flags; (3) crushed gravel and sand; (4) steel clothes line posts; (6) chestnut fencing and posts; (6) copper cylinders; (7) w.c. pedestals; (8) flushing tanks (cast-iron and plastic); (9) dustbins; (10) wooden draining boards; (11) wooden w.c. seats; (12) copper pipe; (13) polythene tube for cold water services; (14) overalls; (15) tarmacadam and fine cold asphalt (supply only); (16) surface dressing of carriageways; (17) carriageway, footpath and drainage works (labour only); (18) grave slabs and kerb surrounds (supply and fix). Documents from the Engineer and Surveyor, Victoria Park, Darlaston. Tenders by Feb. 27.

"Dewsbury, Yorks.—Supply of materials, for B.C. Tenders by March 3.

Dewsbury, Yorks.—Supply and delivery of approx. 40,000 gallons of petrol (to be delivered as and when required in lots of not less than 1,000 gallons) and/or 3,000 gallons of Dery fuel oil (to be delivered as and when required in lots of not less than 500 gallons).

for B.C. Documents from the Transport Manager, George Street Depot, Dewsbury. Tenders by Feb. 18.

Dundee.—Supply and delivery of road traffic signs, for B.C. Documents from the City Engineer, 21 City Square, Dundee.—Supply of Materials, for B.C. Tenders by Feb. 27.

*Dunstable, Beds.—Supply of materials, for B.C. Tenders by Feb. 27.

*Ebbw Vale, Mon.—Following for the period April 1, 1960, to March 31, 1961, for U.D.C.:

(a) Engine oils and greases (summer and winter grades); (b) tar and bituminous macadam (various grades); (c) general stores; (d) window cleaning; (e) concrete products; (f) petrol, paraffin, T.V.O., gas oil and derv; (g) clean sharp sand; (h) cement (ordinary and rapid hardening); (i) concrete coarse aggregate and winter grit. Documents from 1. M. Davies, engineer and surveyor, Council Offices, Ebbw Vale. Tenders by March 5.

*Flintshire.—Supply of physical education equipment, for Co. E.C. Tenders by Feb. 26.

*Fulwood, Lancs.—Following for 12 months ending March 31, 1961, for U.D.C.: (a) Tarmacadam and bitumen macadam; (b) hot rolled asphalt; (c) fine cold asphalt; (d) premixed waterbound macadam; (e) concrete kerbs; (f) tarspraying roads (by contract); (g) commercial petrol; (h) diesel oil (automotive); (i) domestic fuel oil for central heating, Documents from the Engineer and Surveyor, Council Offices, Garstang Road, Fulwood, near Preston. Tenders by Feb. 27.

*Fyle, Lancs.—Supply and delivery of sluice valves and air valves, for Water Board. Documents from Engineer to the Board, Sefton Street, Blackpool. Tenders by March 9.

*Gariorth, Yorks.—Following for 12 months commencing April 1, 1960, tor U.D.C.: (1) Electric light oulos; (2) macadam, dry and coated; (3) surface dressing of roads by pressure tanker; (4) sand and gravel; (5) concrete kerbs and flags; (6) petrol, diesel and gas oi; (7) scavenger orooms and refilling of Lewin mechanical sweeper brushes; (8) clearing of sludge from and leading of ashes to drying beds at Owlwood sewage works, Allerton Bywater. Documents from G. N. Smith

"Golborne, Lancs.—Supply of materials, for U.D.C. Tenders by Feo. 29.
"Gravesend, Kent.—Supply of artificial stone paving and kerbing, for B.C. Tenders by Feb. 19.

paving and kerbing, for D.C. Tenuers by Feb. 19.

Haltemprice, Yorks.—Following during the 12 month period commencing April 1, 1960, for U.D.C.: (1) Gravel; (2) sand; (3) cement; (4) whinstone chippings; (5) tarmac; (6) saltiglazed ware pipes; (7) precast concrete goods; (8) hot dressings applied; (9) clay ware field pipes; (10) protective clothing; (11) cast-iron goods; (12) dustbins; (13) road sweepers brooms; (14) motor spirit; (15) diesel/gas oil; (16) fine cold asphalt; (17) cold dressings; (18) street lighting lamps and tubes; (19) coal. Documents from the Engineer and Surveyor, Anlaby House, Anlaby, East Yorkshire. Tenders by Feb. 17.

Haverfordwest, Pembs.—Following for a

Tenders by Feb. 17.

Haverfordwest, Pembs.—Following for a period of 12 months from April 1, 1960, for B.C.: (a) Petrol and oils; (b) precast concrete slabs and kerbs; (c) dry and tarred stone, gravel and sand; (d) building materials; (e) haulage. Documents from the Borough Surveyor, 2 Picton Place, Haverfordwest. Tenders by Feb. 22.

veyor, 2 Picton Place, Haverfordwest. Tenders by Feb. 22.

High Wycombe, Bucks.—Following for the 12 months ending March 31, 1961, for B.C.; (1) Ballast, washed sand, building sand, shingle, etc.; (2) Portland cement; (3) manhole covers and frames, gully grates and frames, etc.; (4) granite and limestone tarmacadam; (5) concrete kerb, flag paving, etc.; (6) granite chippings; (7) petrol; (8) workmen's clothing. Documents from the Engineer and Surveyor, Municipal Offices, Queen Victoria Road, High Wycombe. Tenders by Feb. 23.

Irlam. Lanes.—Following for the year end-

Victoria Road, High Wycombe. Tenders by Feb. 23.

Irlam, Lancs.—Following for the year ending March 31, 1961, for U.D.C.: Salt-glazed ware pipes; broken stone; chippings; bitumen macadam; tarmacadam; concrete flags; concrete kerbs and channels; electric lamps; petrol. Documents from the Engineer and Surveyor, Council Offices, Irlam, Manchester. Tenders by Feb. 27.

Isle of Wight.—Following during the 12 months commencing April 1, 1960, for C.C.: (1) Broken stone, hardcore, gravel, clinker, ashes, aggregates for concrete, shingle and sand, blockstone and rubble—all delivered to roadside; (2) gravel aggregates delivered to roadside; (3) tar and bitumen binders; (4) tar and bituminous macadam, tar or asphalt dense surfacing, and fine cold asphalt materials (supplying or supplying and spreading); (5) lorry hire, per hour; (6) road roller hire; (7) haulage, per ton and per cu. yd.; (8) tools; (9) porous stoneware, concrete and pitch fibre, pipes, cement and bricks; (10) granite, limestone and slag—all delivered to quays. Documents from L. H. Baines, clerk of the Council,

County Hall, Newport, Isle of Wight. Tenders by Feb. 24.

County Fran, two policy for materials, for materials, for U.D.C. Tenders by Feb. 27.
Leyland, Lancs.—Following during the period from April 1, 1960, to March 31, 1961, for U.D.C. (1) Tar and bituminous compounds; (2) filled bitumen; (3) tarred and kiruminous macadam; (4) granite, chippings kiruminous macadam; (4) granite, chippings (5) compounds; (2) filled bitumen; (3) tarred and bituminous macadam; (4) granite, chippings and crushed gravel (surface dressing); (5) clinkers, ashes and shale; (6) rubble, broken stone, stone, gravel and sand; (7) concrete kerbs, flags and channels; (8) stoneware and concrete pipes, tubes, gullies and specials; (9) iron castings—gully grates, manhole covers and waterworks castings; (10) plastic compound for traffic lines; (11) motor haulage hire. Documents from F. D. Howe, engineer and surveyor, Council Offices, Leyland. Tenders by Feb. 20.

London.—Supply of the following, for

hire. Documents from F. D. Howe, engineer and surveyor, Council Offices, Leyland. Tenders by Feb. 20.

London.—Supply of the following, for Trinity House: Boat hooks, cleaning cloths, disinfectants, soaps, sundry cleaning stores, brooms and brushes, flags and bunting, glassware and crockery, cotton waste, chamois leathers and metal polish. Documents from the Secretary. Trinity House. Tower Hill, London, E.C.3. Tenders by Feb. 24.

Maidstone, Kent.—Following during the year ending March 31, 1961, for B.C.: (1) Tarred and bitumen ragstone; (2) surface dressing; (3) tarmacadam surfacing of roads and paths; (4) concrete kerbs, slabs and edging; (5) cold asphalt; (6) grit, ballast and sand; (7) dustbins; (8) chestnut spile fencing. Documents from the Borough Surveyor, Palace Avenue, Maidstone. Tenders by Feb. 22.

Mansfield Woodhouse, Notts.—Following, for U.D.C.: (1) Tarred macadam; (2) bituminous macadam; (3) tar for road dressings; (4) broken slag and granite for tar spraying; (5) precast (granite) concrete paving flags; (7) scavenging brushes and rotary sweeper brushes. Documents from the Surveyor and Engineer, Council Offices, Manor House, Mansfield Woodhouse. Tenders by Feb. 27.

Margate, Kent.—Following, for the 12 months commencing April 1, 1960, for B.C.: (1) Kerb and channel and slabs; (2) cement; (3) concrete aggregates and building sands; (+) tarmacadam and cold asphalt; (5) brushes and brooms and general ironmongery; (6) general building materials. Documents from the Borough Engineer, 38 Grosvenor Place, Margate. Tenders by Feb. 20.

Mexborough, Yorks.—Following materials for the period of 12 months ending March 31, 1961, for U.D.C.: Dry and tarred slag; gravel, sand, etc.; concrete kerb, etc. Documents from the Surveyor, Council Offices, Adwick Road, Mexborough. Tenders by Feb. 27.

eb. 27.

Mexborough, Yorks.—Supply and delivery of
Mexborough and delivery of purified dried vacuum salt by air discharge for the waterworks undertaking for the period of six months ending Sept. 30, 1960, for U.D.C. Documents from the Waterworks of six months ending Sept. 30, 1960, for U.D.C. Documents from the Waterworks Engineer, Council Offices, Adwick Road, Mexborough. Tenders by Feb. 27.

U.D.C. Documents from the Waterworks Engineer, Council Offices, Adwick Road, Mexborough. Tenders by Feb. 27.

Middlesbrough.—During the year ending March 31, 1961, for Tees Valley and Cleveland Water Board: (1) Spun-iron concrete-lined pipes, 3in.-27in. diameter; (2) spun-iron concrete-lined pipes, with Tyton joints, 3in.-27in. diameter; (3) cast-iron concrete-lined pipes, 25in to 36in.; (4) cast-iron specials, unlined, 3in.-36in. diameter; (5) cast-iron bolted gland special pipes, unlined, 3in.-36in. diameter; (6) cast-iron bolted gland special pipes, unlined, 3in.-36in. diameter; (6) cast-iron surface boxes; (7) precast concrete ferrule box flags; (8) precast concrete sections; (9) precast concrete hydrant indicator posts; (10) bricks—common and engineering; (11) waterworks pattern double flanged sluice valves; (12) B.S.S. No. 750-1950 screw-down streamline pattern hydrants; (13) sand and gravel; (14) Portland cement; (15) paint; (16) painters' and decorators' brushes; (17) nails, screws, nuts and bolts; (18) cleaning materials; (19) protective clothing; (20) stop cocks and stop cock ferrules; (21) shovels and Newcastle draining tools; (22) electric lamps; (23) bass brooms, sweeping brushes (unshafted) and scrubbing brushes; (24) cast-iron leadless split collars; stationery—(25) section A—ruled and printed forms, plain stationery, etc.; (26) section B—ruled and printed books. Applications in writing to E. A. Morris, clerk of the Board, Water Board Offices, Corporation Road, Middlesbrough. Tenders by Feb. 24.

Mountain Ash, Glam.—Following for a period of 12 months commencing April 1, 1960, for U.D.C.: (1) Roadstone, dry and coated chippings and gravel; (2) sand and cement; (3) stongware pipes and specials; (4) oils and greases; (5) ironmongery; (6) petrol and diesel fuels; (7) precast concrete kerbs and paving; (8) disinfectant and toilet rolls; (9) tyres. Documents from the Surveyor, Town Hall, Mountain Ash. Tenders by March 7.

Newmarket, Sufolk.—Following during the 12 months ending March 31, 1961, for U.D

March 7.
Newmarket, Suffolk.—Following during the 12 months ending March 31, 1961, for U.D.C.:

(1) Cement; (2) sand and gravel; (3) granite, tarred, and bituminous and dry; (4) slag—tarred and bituminous; (5) gravel asphalt; (6) concrete paving slabs and kerbs; (7) hot tar and bituminous emulsions; (8) mechanical haulage; (9) team labour; (10) tools and brushes; (11) disinfectants, chlorine and toilet paper; (12) Lewin sweeper brushes; (13) smiths' work; (14) petrol and oils. Documents from F. B. Waterfall, engineer and surveyor, Severals House, Bury Road, Newmarket. Tenders by Feb. 22.

Newton-le-Willows. Lancs.—Following for

surveyor, Severals House, Bury Road, Newmarket. Tenders by Feb. 22.

Newton-le-Willows, Lancs.—Following for the year ending March 31, 1961, for U.D.C.: (1) Concrete kerbs, flags, etc.; (2) cement; (3) broken stone and chippings; (4) sand, shale and ashes; (5) refined tar and bitumen; (6) tarspraying; (7) scavenging brushes and refitting; (8) iron castings; (9) pipes and gullies; (10) coated macadam, etc.; (11) tools; (12) hired transport. Documents from the Surveyor, Town Hall, Market Street, Newton-le-Willows, on receipt of a 6d. stamped addressed envelope. Tenders by Feb. 29.

Northern Ireland.—Following required for the constabulary forces, for Ministry of Home Affairs: Batteries, bulbs, torch cases, etc.; badges and buttons (metal); badges and chevrons (cloth); horn buttons; forage caps; gloves; nylon stockings. Documents from the Secretary, Ministry of Home Affairs, Stormont, Belfast, 4.

Oldham, Lancs.—Supply and delivery to the Corporation's various depots of petrol, diesel oil, lubricating oil, tractor vaporising oil and paraffin during the period April 1, 1960, to March 31, 1961, for B.C. Documents from Edward Haines, town clerk, Town Hall, Oldham. Tenders by Feb. 19.

Orpington, Kent.—Following for the year commencing April 1, 1960, for U.D.C.: (1)

Oldham. Tenders by Feb. 19.

Orpington, Kent.—Following for the year commencing April 1, 1960, for U.D.C.: (1) Precast concrete kerbs, paying slabs, quadrants and edging boards; (2) surface dressing of roads and supply of tar; (3) cold asphalt; (4) lubricating oils and greases; (5) supplying and laying of tar-coated materials; (6) sand and ballast; (7) bituminous emulsion (cold); (8) petrol and diesel oil. Documents from the Engineer and Surveyor, Civic Offices, The Walnuts, High Street, Orpington. Tenders by Feb. 27.

Padiham.—Following for the 12 months ending March 31, 1961, for U.D.C.: Earthenware pipes; concrete kerbs and flags; tarcamadam; natural stone flags and kerbs; tar and bitumen; filled bitumen and filled pitch; creosote oil; cement and lime; broken stone and chippings; heavy-bodied white lead paint; turpentine; full gloss synthetic enamel and undercoating for gloss synthetic enamel and undercoating for external and internal use; emulsion paint for internal use. Documents from Alan J. Shaw, surveyor and water engineer, Town Hall, Padiham. Tenders by Feb. 28.

Padiham. Tenders by Feb. 28.

Plymouth.—Following required in connection with the erection of traditional houses and flats by direct labour, for City Council: Copper tubes and fittings; timber; combination tanks; reconstructed stone fireplaces; sheet lead; plaster lath; plaster; roof tiling (concrete), complete; pitchmastic flooring precast concrete units; sanitary fittings; salt-glazed ware; asbestos rainwater goods; castion soil and vent pipes. Documents from the City Engineer, Guildhall, Plymouth.

Panlar—Following for the year ending

glazed ware; asbestos rainwater goods; castiron soil and vent pipes. Documents from the City Engineer, Guildhall, Plymouth.

Poplar.—Following for the year ending March 31, 1961, for B.C.: Broomheads (for street sweeping); chemical fluid (chlorine); fuel, gas and burning oils; bath salts; cleansing powder; scap solver; soap and soap powder; soap dissolver; soaps and soap powder; soap substitute; disposal of second-hand paving stone, setts, etc. Documents from the Town Clerk, Poplar Town Hall, Bow Road, E.3. Tenders by Feb. 24.

Saffron Walden, Essex.—Following for the year ending March 31, 1961, for B.C.: Tarmacadam and bituminous macadam, asphalt and concrete (supplied); tarmacadam and bituminous macadam, asphalt (mechanically laid); fine cold asphalt; granite for surface dressing; shingle for surface dressing; surface dressing, shingle for surface dressing; surface dressing and shad; salt for water softening and snow clearing; plastic white line material and road paint; concrete kerbs and paving slabs; cement; refined tar and bitumen emulsion in barrels; cutting (mechanically) roadside verges; petrol and oils; salt-glazed pipes; concrete pipes and gullies. Documents from H. C. Stacev. town clerk. Municipal Offices, Saffron Walden. Tenders by Feb. 29.

Salford.—Following during the period April 1, 1960, to March 31, 1961, for City Council: (1) 15ft. concrete columns; (2) 60-W sodium vapour lanterns with ancillary equipment; (3) 100-150-W class B lantens; (4) synchronous time switches (solar dial). Documents from the Street Lighting Superintendent, 9 Frederick Road, Pendleton, Salford, 6. Tenders by March 1.

Salisbury.—Supply of the following materials during the year commencing April 1, 1960, for

March 1. Salisbury.—Supply of the following materials during the year commencing April 1, 1960, for City Council: Brushes, iron castings, stone-

ware pipes, cement, roadstone, tarred and bituminous macadam, sand, ballast, concrete kerb and paving slabs, and petrol. Documents from City Engineer, The Council House, Bourne Hill, Salisbury. Tenders by Feb. 22.

kerb and paving slabs, and petrol. Documents from City Engineer, The Council House, Bourne Hill, Salisbury. Tenders by Feb. 22.

Selby, Yorks.—Following for the year ending March 31, 1961: (1) Gravel, sand and ashes; (2) mechanical haulage; (3) team labour; (4) hire of road and footpath rollers. Documents from F. Pool, clerk of the Council, Council Offices, 1 Abbey Place, Selby. Tenders by Feb. 20.

*Settle, Yorks.—Supply of road materials, for R.D.C. Tenders by Feb. 27.

Stocksbridge, Yorks.—Following for the year ending March 31, 1961, for U.D.C.: Dry roadstone; coated roadstone; concrete flags and kerbs; tar; bitumen. Documents from the Surveyor, Town Hall, Stocksbridge, Sheffield. Tenders by March 7.

Stoke-on-Trent, Staffs.—Supply of sanitary ware and fittings at Ripon Road Health Centre, for City Council. Written application to the City Architect, Kingsway, Stoke-on-Trent, by Feb. 16. Deposit £2 in notes. Tenders by March 10.

Thingoe, West Suffolk.—Bulk supply of petrol and diesel oil during 1960/61, for R.D.C. Documents from J. H. Whitfield, clerk of the Council, 1 Northgate Street, Bury St. Edmunds. Tenders by March 1.

Whitworth, Lancs.—Following for a period of 12 months commencing April 1, 1960, for U.D.C.: (1) Concrete flags and kerbs; (2) bituminous granite; (3) local broken stone; (4) sand; (5) coke and coal; (6) tools and brooms. Documents from the Engineer and Surveyor, Council Offices, Whitworth, near Rochdale. Tenders by Feb. 20.

Wigan, Lancs.—Following, for the year ending March 31, 1961, for B.C.: (1) Grate parts; (2) ironmongery; (3) lead; (4) plumbing materials; (5) paint brushes; (6) glass. Documents from the Borough Engineer, Municipal Buildings, Library Street, Wigan. Tenders by March 1.

Wortley, Yorks.—Following for the 12 months commencing April, 1, 1960, for R.D.C.: (1) Cemert: (2) tran and bitumen for surface

March 1.

Wortley, Yorks.—Following for the 12 months commencing April, 1, 1960, for R.D.C.: (1) Cement; (2) tar and bitumen for surface dressing in bulk in barrels, and for supply and apply; (3) bituminous cold emulsion, in bulk, in barrels, and for supply and apply; (4) tarred macadam and bituminous macadam (granite, limestone and slag); (5) cold asphalt and sealing grit; (6) clean chippings and dust (granite, limestone and slag); (7) walling stone, broken stone and pitching; (8) sand and gravel; (9) concrete flags, kerbs, edging and channel blocks; (10) stoneware pipes, bends, junctions and specials; (11) bricks; (12) castiron gulley grates and frames and manhole covers and frames; (13) tools and implements; (14) lubricating oils and paraffin; (15) coal; (16) hire of plant and transport. Documents from Engineer and Surveyor, Council Offices, Grenoside, Sheffield. Tenders by Feb. 29.

MISCELLANEOUS

MISCELLANEOUS

Norfolk.—Following, for C.C.: Aerial survey of approximately 18 miles of highway including the supply of distortion-free aerial photographs. The survey plans are to be to a scale of 1:500 with a guaranteed accuracy such that 95 per cent. of all detail shall be plotted within 0.5mm. of their correct coordinate position. Documents from the County Surveyor, Council Offices, Thorpe Road, Norwich. Deposit £5. Tenders by Feb. 29. eb. 29.

PLANT AND MECHANICAL TRANSPORT

PLANT AND MECHANICAL TRANSPORT

Braintree and Bocking, Essex.—Supply of electric pumping machinery with standby oil plant for the development of a new source of water supply, for U.D.C., comprising contract 2: (a) Duplicate booster pumps, each capable of pumping Im. gallon in 16 hours against a head of approximately 150ft.; (b) duplicate booster plant consisting of electrically driven pumps, each capable of pumping at the rate of 20,000 g.p.h. against a head of approximately 110ft.; (c) booster pumping machinery to pump at the rate of up to 165,000 g.p.h. into supply under a variable head not exceeding approximately 100ft.; (d) an oil driven generator as a standby to run an electrically driven set (part of (c) above), duty of pump 65,000 g.p.h.; contract 3—three submersible pumps, each capable of pumping Im. gallons in 16 hours against a head of approximately 220ft. Immediate applications to Herbert Lapworth Partners, 25 Victoria Street, Westminster, S.W.I.

Isle of Ely.—Following, for C.C.: One front bucket attachment for Shawnee Warrier excavator; seven 7ft. by 5ft. roadmen's shelters; two air-operated power rammers; six light towed winter grit spreaders; one small vibrating plate; one Horndraulic loader for Ferguson tractor; two tractor-operated left-hand grass mowers; one portable road breaker; one 6ft. sweeper attachment to tractor; one Shawnee Warrior excavator and

tractor. Documents from the County Surveyor, County Hall, March. Tenders by veyor, Feb. 16.

Feb. 16.
Kent.—Supply and erection of four electrically driven vertical spindle axial flow pumps, each of 50 cusees capacity, required for the Little Stour pumping station, which is to be constructed near Stourmouth, approximately seven miles north-east of Canterbury, for River Board. Applications in writing to the Engineer to the Board, 78 College Road, Maidstone. Maidstone.

aldstone.

Kingston-upon-Thames, Surrey.—Supply of steel-bodied refuse trailers, for B.C. ocuments from the Borough Surveyor, Guild-ill, Kingston-upon-Thames. Deposit £1. enders by Feb. 29.

Tenders by Feb. 29.

*Lancashire.—Supply of plant, for Copposit £5, payable to C.C. Tenders

Deposit £5, payable to C.C. Tenders by March 5.

Loughborough, Leics.—Supply and delivery of one Karrier Bantam refuse wagon with 11ft. 5in. wheelbase chassis and equipped as follows, for B.C.: Six-seater crew-type cab; Rootes light diesel engine; four speed gear box; hydraulic brakes; 12 volt electrical equipment; 27in. \$\pi\$ 6in. tyres; front shock absorbers; special front and rear springs; all steel 10 cu. yd. refuse body and tipping gear; painted and lettered; fitted with number plates. Tenders to Arthur Usher, town clerk, Southfields, Loughborough, by Feb. 16.

Northern Ireland.—Following, for Milk Marketing Board: Supply of four new Bedford (4-ton) vehicles and for the purchase of used motor vehicles. Documents from General Manager, Milk Marketing Board for Northern Ireland, Castlehill Road, Belfast, 4. Tenders by Feb. 19.

by Feb. 19.

Plymouth.—Supply and delivery to Prince Rock Depot, Macadam Road, of the following, for City Council: Four Lloyds 27in. side wheel motor mowers; two Acto 24in. four-stroke motor mowers, complete with grass boxes and carriers; one set Ransomes quintuple gang mowers, with steel wheels and single point attachment (arrangement A). Delivery dates should be stated. Tenders in sealed envelopes endorsed "Tender for mowers," to the Town Clerk, Pounds House, Plymouth, by Feb. 24.

Taunton. Som.—Supply of one new Dinkum

Taunton, Som.—Supply of one new Dinkum Digger Major on Fordson chassis with front loader, for B.C. Documents from W. J. Won-nacott, waterworks engineer and manager, nacott, waterworks engineer and manager, Flook House, Station Road, Taunton. Tenders

by Feb. 23.

Tendring, Essex.—Following, for R.D.C.:
Supply of one new 12 cu. yd. 4-ton l.w.b.
Bedford/Eagle side-loading refuse collection
vehicle with petrol engine; hydraulic ram
to be supported with body stabiliser; salvage
rack (6ft. 6in. by 4ft. 3in, by 1ft. 6in.) to be
titted on roof of cab. The Council may require
an old side-loading refuse collection vehicle to
be taken in part exchange. Documents from be taken in part exchange. Documents from Chief Public Health Inspector, Council Offices, Weeley, near Clacton-on-Sea. Tenders by

PLAYING FIELDS, PARKS, ETC.

PLAYING FIELDS, PARKS, ETC.

Dudley, Worcs.—Following, for B.C.: (a) School playing field at Sycamore Green; (b) finishing works on Old Park Farm estate. comprising (a) 3,800 lin. yd. of bulk excavation, sub soil drainage; 9,000 sq. yd. of turfing, and 1,100 sq. yd. of 2in. tramacadam-asphalt footpath; (b) 4,300 cu. yd. of bulk excavation; 3,750 sq. yd. of tarmacadam asphalt surfacing; 12,300 sq. yd. of seeding, and 11,400 sq. yd. of turfing. Applications to the Borough Engineer. The Council House, Priory Road, Dudley, by Feb. 9. Deposit £2 2s. each contract. Kidsgrove, Staffs.—Complete reconstruction of Clough Hall Football Field, for U.D.C. The works comprise the breaking-up of the existing surface, drainage, filling to low areas, grading, soiling and seeding. Documents from the Engineer and Surveyor, Town Hall, Kidsgrove, Stoke-on-Trent. Deposit £2 2s. Tenders by Feb. 17.

*Lancashire.—Development of playing fields and fencing at various schools, for C.C. Apply by Feb. 26.

*Portadown, Armagh.—Completion of a sports ground, known as the Hegga Ground Bridge.

and fencing at various schools, for C.C. Apply by Feb. 26.

Portadown, Armagh.—Completion of a sports ground, known as the Hegan Ground, Bridge Street, Portadown, for Sports Ground Committee. Documents from H. M. Thompson. Church Place, Portadown. Tenders by Feb. 18.

Sunderland, Dur.—Construction of a children's playground at Allendale Road, Farringdon estate, for B.C. Documents from Borough Engineer. 27 Fawcett Street, Sunderland. Deposit £2 2s. Tenders by Feb. 16.

Swansea.—Layout of grounds as Clase and Bonymaen County Primary Schools, for B.C. The work includes excavation, filling, removal of surplus material, levelling, tilthing and seeding, with subsoil drainage and other contingent works over an area of approx. 34,300 and 17,500 sq. yd. respectively. Documents from J. Owen Parry and Lewis, civil engineers. Arcade Chambers, College Street, Ammanford, South Wales. Deposit £5 5s, payable to Consulting Engineers. Tenders by Feb. 29.

Walsall, Staffs.—Construction of approxi-mately eight acres of playing fields, involving land drainage, site grading and the construc-tion of Redgra pitches, concrete cricket wickets and jumping pits at Whateley Road School, for B.C. Documents from M. E. Habershon, engineer and surveyor, Council House, Walsall. Deposit £5 5s. Tenders by Feb. 23.

ROADS, BRIDGES AND SITE WORKS

*Bedworth, War.—Roads and sewers, Exhall industrial site, stage I, contract II, for U.D.C. Deposit £10 10s (cheques payable to U.D.C.). Tenders by March 14.

*Bentleet, Essex.—Private street works, for U.D.C. Apply by Feb. 22. Deposit £2.

*Berkshire.—Reconstruction of Broad Lane, Bracknell, for C.C. Deposit £2 2s. Tenders by Feb. 18.

*Bilston, Staffs.—Lowering of Coseley Road, for B.C. Apply by Feb. 19. Deposit £5 5s. (cheques payable to Corporation).

*Birkenhead, Ches.—Improvement Pensby Road, for B.C. Tenders by Feb. 22.

*B:rm.ngham.—W.dening of Coventry Road for City Council. Deposit £2 2s (cheques payable to City Surveyor). Tenders by Feb. 24.

*Bsrm.ngham.—W.dening of Coventry Road for City Council. Deposit £2 2s (cheques payable to City Surveyor). Tenders by Feb. 24.

"Bradford, Yorks.—Asphalt surfacing, for City Council. Deposit £2 2s. Tenders by Feb. 23.

City Council. Deposit £2 2s. Tenders by reb. 23.

*Braintree and Bocking, Essex.—Roads and sewers, Candlestick Meadow, for U.D.C Deposit £2 2s. Tenders by Feb. 26.

*Breconshire.—Surface dressing, 1960, for C.C. Tenders by March 7.

*Brierley Hill, Statis.—Resurfacing county roads, for U.D.C Deposit £2 2s. Tenders by Feb. 29.

*Brighton, Sussex.—Roadworks at Warren Road-ralmer Road, Woodingdean, for B.C. Tenders by Feb. 27.

*Camberwell.—Widening of A.205, Lordship Lane (part), for B.C. Deposit £3 3s. Tenders by March 8.

*Camberwell.—Widening of A.205, Lordship Lane (part), for B.C. Deposit £3 3s. Tenders by March 8.

Cariton, Notts.—Following, for U.D.C.: Construction of sewers, carriageways, footpaths and incidental works, at (a) Bakewell Avenue, (b) Belper Avenue. Documents from E. C. Kirk, surveyor, Council House, Burton Road, Cariton. Deposit £2 each contract. Tenders by Feb. 24.

Chigwell, Essex.—Various works at Fairview Road, for U.D.C., comprising approximately 270 lin. yd. surface water sewer, carriageway drainage, 680 lin. yd. kerbing, 1,970 sq. yd. carriageway, 730 sq. yd. tootways. Documents from the Surveyor, Council Offices, Old Station Road, Loughton. Deposit £2 2s. Tenders by March 1.

Epsom and Ewell, Surrey.—Construction of approximately 230 lin. yd. of tarmacadam tootpath and fencing at light industrial estate, for B.C. Documents from Colin Cobbett, engineer and surveyor, Town Hall, Epsom. Deposit £2 2s. Tenders by Feb. 19.

*Evesham, Wores.—Advance preparation of Bewdley Lane housing site, for B.C. Deposit £2 2s. Tenders by Feb. 29.

Exeter.—Construction of carriageways, footways, surface water drainage, etc., at Countess Wear roundabout, for City Council, comprising the laying of approximately 3,800 sq. yd. of 9in. reinforced concrete carriageway and 14in. hot rolled asphals surfacing, 200 sq. yd. of 9in. pitching stone and bitumen macadam. 1,200 sq. yd. of precast concrete and tar-paved footways, 900 lin. yd. of concrete kerbing and other incidental works. Documents from John Brierley, engineer and surveyor, Municipal Offices, 7 Southernhay West, Exeter. Deposit £2 2s. Tenders by Feb. 22.

Flint.—Advance preparation works at Pen Goch housing estate, for B.C. Construction of works comprising approximately 7,350

pal Offices, 7 Southernhay West, Exeter. Deposit £2 2s. Tenders by Feb. 22.

Flint.—Advance preparation works at Pen Goch housing estate, for B.C. Construction of works comprising approximately 7,350 super. yd. of hardcore roads, including formation excavation to roads and footways; construction of kerb race and 2,450 lin. yd. 21in. to 9in. foul and surface water sewers including p.c. and brick manholes, road gullies, and incidental works. Documents from the Engineer and Surveyor, Municipal Offices, Earl Street, Flint. Deposit £2 2s. Tenders by Feb. 29.

Fraserburgh, Aberdeens.—Fabrication and erection of two opening bridges in connection with the proposed improvements at Faithlie Basin, for Harbour Commissioners. The bridges will be of the traversing type. One bridge, for vehicles, will be electrically operated and will span a 40ft. clear opening. The other will be a hand-operated footbridge spanning a 27ft. skew opening. Applications to Leitch and Sharpe, consulting engineers, 65 Bats Street, Glasgow, C.2, before Feb. 19.

Hastings, Sussex.—Construction at the Popswood industrial estate extension of 3.050

Hastings, Sussex. — Construction at the Ponswood industrial estate extension of 3,650 sq. yd. of reinforced concrete carriageway. 810 lin. yd. of foul and surface water sewer, maximum size 15in. diameter and incidental works, including manholes, etc., for B.C. Documents from the Engineer, 37 Wellington

Square, Hastings. Deposit £2 2s. Tenders by Feb. 25.

by Feb. 25, Hatfield, Herts.—Construction of a new road, Hatfield, Herts.—Construction of a new road, sewers, traine signals and ancillary works consisting of approximately the following, for the Development Corporation: 7,200 super yd. carnageway with lean-mix concrete foundation, and tarmacadam surface; 3,300 super. yd. tarmacadam footways; 2,000 lin. yd. 8in. x 6in. precast concrete kerbs; 850 lin. yd. 9in. dia. concrete surface water sewer; ten concrete mapholes: 50 concrete guillies; one set traffic dia. concrete surface water sewer; ten concrete
manholes; 50 concrete guilles; one set traffic
control signals. Documents from the Chief
Engineer at 4 Wigmores South, Howardsgate,
Welwyn Garden City. Plans may be inspected
during normal office hours at the Area Office,
30-34 Market Place, Hatfield. Tenders by
Feb. 22.

Lower Set 1. Construction of necess reads at

during normal office hours at the Area Office, 30-34 Market Place, Hatfield. Tenders by Feb. 22.

Inverness.—Construction of access roads at Portree housing site, for C.C. Documents from Surveyor, County Buildings, Ardross Street, Inverness. Tenders by Feb 17.

Kendal, Westmor.—Construction of the roads and sewers required in connection with the development of approximately 20 acres of land as an industrial area at Shap Road, for B.C. Documents from Engineer and Surveyor, Municipal Offices, Lowther Street, Kendal. Deposit £2 2s. Tenders by Feb. 18.

Lancashire.—Following, for C.C.: Roadworks and bridgeworks in the extension of the Widnes Approach Road, contract B, from the termination of contract A northwards towards pitton Road. The roadworks comprise about 210 lin. yd. of the Widnes Approach Koad and about 270 lin. yd. of a Slip Road leading to the trading estate. The bridgeworks comprise the construction of a two-span bridge, 123ft. long over private sidings, a single 77ft. span bridge over a main line railway, and a reinforced concrete retaining wall 283ft. long. The Decks consist of steel girders carrying a reinforced concrete road slao, and the abulments and wing walls are of brick-faced mass concrete. All foundations are supported on bored cast in-situ piles. Documents from County Surveyor, P.O. Box 9, County Hail, Preston. Deposit £25, cheques payable to C.C. Tenders by March 7.

Leicester.—Foliowing at Glen Parva estate, for City Council: Approximately 7,460 sq. yo. macadam footway; approximately 7,400 in. yd. precast concrete kerbs and edging keros; approximately 5,540 keyed tertificates of the property of th

7,400 nn. macadam footway; approximately 7,400 nn. yd. precast concrete kerbs and edging keros; approximately 5,530 sq. yd. turing and soling of verges and open spaces. Documents from John L. Peckett, city surveyor, Town Hall, Leicester. Deposit £1 ls. Tenders by March 7

Maidstone, Kent. --Provision of a footpath general excavation works to a riverside k, including surfacing with tarmacadam, B.C. Documents from the Borough Sur-or, Palace Avenue, Maidstone. Tenders and general

Merionethsnire.—Surface dressing of trunk and county highways during the year commencing April 1, 1960, for C.C. Applications, with s.a.e., to County Surveyor, County Offices, Penarlag, Dolgellau. Tenders by Feb. 22.

*Middlesex.—Demolition and reconstruction of bridge over the River Frays, for C.C. Deposit £10. Tenders by March 16.

Northamnton—Town Centre, roads reconstruction of the county of the count

middless.—Demontion and reconstruction of bridge over the River Frays, for C.C. Deposit £10. Tenders by March 16.

Northampton.—Town centre roads reconstruction—phase II, for B.C. Supply and laying by machine of approximately 3,500 sq. yd. two-course hot rolled asphalt. Documents from the Engineer, Guildhall, Northampton. Tenders by Feb. 19.

Northfleet, Kent.—Following, for U.D.C.: Private street works—the construction of streets totalling some 8,200 sq. yd. of hard-core and macadam carriageway, with footpaths and surface water drainage; sewers—the laying of some 2,500 lin. yd. of 6in. diameter sewers, up to 18ft. in depth together with some 630 lin. yd. of 4in. house drain connections. Documents from the Engineer and Surveyor, Town Hall, Northfleet. Deposit £2 2s. Tenders by March I.

*Orpington, Kent.—Making-up of north accommodation road, for U.D.C. Deposit £2. Tenders by Feb. 26.

Renfrewshire.—Removal of tramway track and reinstatement between Eastwood Toll and the Glasgow city boundary, a distance of approximately 2,240 lin. yd., for C.C. Documents from the Surveyor, County Buildings, Paisley. Tenders by Feb. 26.

Royton, Lancs.—Renewal of kerbing and flagging of footways, and the supply of all materials, labour and plant, for U.D.C. Documents from the Surveyor, Town Hall. Royton. Tenders by Feb. 29.

St. Albans.—Constructing a hardstanding of approximately 800 sq. yd. in hardcore and tarmacadam at Marshalwick estate, for City Council. Documents from the Engineer and Surveyor, 16 St. Peter Street, St. Albans. Tenders by Feb. 25.

Salisbury and Wilton, Wilts.—Construction of main site works in the village of Fovant.

Surveyor, 16 St. Peter Street, St. Aloans. Tenders by Feb. 25.

Salisbury and Wilton, Wilts.—Construction of main site works in the village of Fovant, consisting of a tarmacadam road, footpaths, drains and water main, for R.D.C. Documents

from C. S. Brown, clerk of the Council, Council Offices, 26 Endless Street, Salisbury. Deposit £2 2s. Plans seen at the offices of the architects, Bothams and Brown, 32 Chipper Lane, Salisbury. Tenders by March 10.

Each seem at the omices of the architects, Bothams and Brown, 32 Chipper Lane, Salisbury. Tenders by March 10.

Stockport, Ches.—Carrying out the realignment, super-elevation and resurfacing of Crossley Road, for B.C., comprising 3,000 sq. yd. of base course in bituminous macadam, 5,000 sq. yd. of wearing course in machinelaid bituminous surfacing, 1,500 sq. yd. dagging, 700 lin. yd. kerbing, drainage and other incidental works. Documents from Surveyor, Town Hall, Stockport. Tenders by Feb. 16.

Stourbridge, Worcs.—Making-up of approx. 100yd. of carriageway, footways and verges at Westwood Avenue on the Norton estate, for B.C. Documents from H. W. Morris, engineer and surveyor, Council House, Stourbridge. Deposit £2 2s. Tenders by March 4.

Stretford, Lancs.—Resurfacing of the playgrounds at Moss Park Schools, Moss Park Road, Stretford, with hot-rolled asphalt on the existing base courses, for B.C. Documents from A. H. Perry, borough engineer and surveyor, Town Hall, Stretford. Deposit £2. Tenders by Feb. 20.

Swansea.—Roadworks in St. John's Road, Manselton, for B.C., comprising 615 cu. vd. of

from A. H. Perry, borough engineer and surveyor, Town Hall, Stretford. Deposit £2. Tenders by Feb. 20.

Swansea.—Roadworks in St. John's Road, Manselton, for B.C., comprising 615 cu. yd. of excavation, 2,278 sq. yd. of bituminous macadam surfacing on existing hardcore, 261 lin. yd. kerbing, 392 sq. yd. of concrete flag paving, together with verges, surface water drainage, lighting and other incidental works. Documents from Engineer and Surveyor, St. Faith's Hall, St. Helen's Road, Swansea. Deposit £2. Tenders by Feb. 25.

Swansea.—Carrying out of private street works in St. John's Road, Manselton, for B.C. The works comprise 615 cu. yd. of excavation, 2,278 sq. yd. of bituminous macadam surfacing on concrete flag paving, together with verges, surface water drainage, lighting and other incidental works. Documents from the Engineer and Surveyor, St. Faith's Hall, St. Helen's Road, Swansea. Deposit £2. Tenders by Feb. 25.

Swinton, Yorks.—Road works on the Thomas Street estate extensions, comprising the construction of approximately 2,250 sq. yo. of carriageway in hard-ore pitching and 400 lin. yd. of 9in. pipe sewer. Documents from the Engineer and Surveyor, Council Offices, Swinton, near Mexborough. Deposit £2 2s. Tenders by Feb. 16.

Torquay, Devon.—Provision and mechanical laying of hot rolled asphalt on various roads, involving approximately 22,000 sq. yd. of surfacing, for B.C. Documents from the Engineer, Town Hall, Torquay. Deposit £2 2s. Tenders by Feb. 20.

*Tottenham, Middx.—Reconstruction of Clyde Road, for B.C. Deposit £2. Tenders by Feb. 24.

Uckfield.—Construction of 140 lin, yd. of tarmeschery excitaters and the property of the property of tarmeschery excitaters and the property of the property of tarmeschery of the property of the property of tarmeschery of the property of the property of tarmeschery of the property of the property of tarmeschery of the property of the property of tarmeschery of the proper

Feb. 24.

Uckfield, Sussex.—Following, for R.D.C.:

Uckfield—construction of 140 iin, yd. of tarmacadam carriageway with paths; Crowborough—surfacing of 1,600 hardcore road, with concrete surfacing of 520 super, yd. of paths; Franton concuments from the Surveyor, Council Offices, Beacon Road, Crowborough.

Tenders by March 7.

Tenders by March 7.

Walthamstow, Essex.—Construction of the improvement of the junction of Wood Street with Lea Bridge Road, for B.C., comprising the widening and resurfacing of the existing carriageway, the construction of a short super-elevated curve, together with kerbing footway verge drainage and other ancillary works, over a length of approximately 130yd. Documents from the Architect, Town Hall, Forest Road, Walthamstow. Deposit £2 2s. Tenders by Feb. 22,

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

Ashbourne, Derbys.—Construction of approximately 1,000vd. of 6in. sewer and appurtenant works at Hulland Ward, for R.D.C. Documents from H. Litchfield, surveyor, Compton Offices, Ashbourne, Deposit £1 1s. Tenders by Feb. 19.

Basingstoke, Hants.—Main drainage of Basing, B5 contract 3, for R.D.C., comprising construction of approximately 10,000yd. of small diameter sewers and rising main, the construction of a sewage pumping station, extensions to an existing sewage disposal works and other ancillary works. Documents from the offices of Howard Humphreys and Sons, consulting engineers, Victoria Station House, Victoria Street, Westminster, S.W.l, by Feb. 19. Deposit £5 5s. (cheques payable to R.D.C.). Plans also seen at the Council Offices, Eastlands, London Road, Basingstoke, by appointment with the Surveyor. Tenders by Feb. 29.

Bullingdon, Oxon.—Following, for R.D.C.: (1) Sewer extension, Old Road, Wheatley—approximately 850yd. of 6in. sewer, together

with ancillary works; (2) improvement works, school premises, Towersey—conversion of main building into two dwellings and the provision of bathroom to the school house, together with drainage and ancillary works; (3) sanitary improvements—provision and improvement of sanitary accommodation and certain drainage work to 1-4 The Croft, Marsh Baldon, and 1-6 Ford Lane, Drayton St. Leonard. Documents from Engineer and Surveyor, Arlington House, 76 Banbury Road, Oxford. Deposit £2 2s. each contract. Tenders by Feb. 22.

"Cambridge.—Surface water relief sewer, Cromwell Road, for City Council. Deposit £2 2s. (cheques payable to Corporation). Tenders by March 10.

Clacton, Essex.—Western area drainage, sea outfall, contract 7, comprising the construction of the following works, for U.D.C.: (a) 36in. diameter cast- and spun-iron outfall sewer, of which some 2,000ft. will be laid in trench inshore and some 2,000ft. will be laid across the foreshore and in the sea bed, also in trench; (b) extension of a 5lin. diameter steel outfall sewer some 230ft. The outfall will be laid in trench, and the work extends from a point near the low water mark. The contract also includes for the removal and disposal of an existing 12in. diameter outfall sewer consisting partly of stoneware pipes surrounded by concrete and partly of castiron pipes supported on cast-iron piles. Documents from John Taylor and Sons, consulting engineers, Artillery House, Artillery Row, Westminster, S.W.I. Deposit £5 (cheques payable to U.D.C.). Plans also seen at the office of the Engineer and Surveyor, Town Hall, Clacton-on-Sea. Tenders by Feb. 29.

Easthampstead, Berks.—Construction of 744 lin, yd of 6in. diameter glazed stoneware

Fob. 29.

Easthampstead, Berks.—Construction of 744 lin, yd of 6in, diameter glazed stoneware sewers, 457 lin, yd. of 4in, diameter asbestoscement rising main, divertor station, manholes, laterals and other ancillary works at North Road, Church Road and Longhill Re'ad, Chavey Road, Bracknell, and Grove Lane, Winkfield, for R.D.C. Documents from the Engineer and Surveyor, Church Road, Bracknell, Deposit £2 2s. (cheques payable to R.D.C.). Tenders by Feb. 25.

Easthampstead, Berks.—Construction of 86 lin, yd. of 6in, diameter glazed stoneware sewer, manhole, lateral and other ancillary works, at Jigs Lane, Warfield, for R.D.C. Documents from the Engineer and Surveyor, Church Road, Bracknell. Deposit £2 2s. (cheques payable to R.D.C.). Tenders by Feb. 25.

Fylde, Lancs.—Laying of 600yd. of 9in, dia-

Feb. 25.
Fylde, Lancs.—Laying of 600yd, of 9in. diameter s.g.w. pipes and the construction of appurtenant manholes and house drains at Newton, near Kirkham, for R.D.C. Documents from the Engineer and Surveyor, 29a Station Road, Kirkham. Deposit £2 2s. (cheques payable to R.D.C.). Tenders by Feb. 23. ation Road, R neques payable b. 23.

Station Road, Kirkham. Deposit £2 2s. (cheques payable to R.D.C.). Tenders by Feb. 23.

Hambledon, Surrey.—Reconstruction of two sludge drying beds in concrete, having a total area of \$25 sq. yd., at Cranleigh sewage disposal works, for R.D.C. Documents from the Engineer and Surveyor, Council Offices, Bury Fields, Guildford. Deposit £2 2s. (cheques payable to R.D.C.). Tenders by March 7.

*Hitchin Herts.—Sewerage contract 8, for R.D.C. Deposit £10. Tenders by Feb. 22.

Ipswich, Suffolk.—Ejector station replacement scheme, for B.C. Construction of five reinforced concrete pumping stations, superstructures to the same, one motor house, and approx. 1,250 lin. yd. of spun-iron rising main, together with sewerage and ancillary works. Documents from the Engineer and Surveyor, 19 Tower Street, Ipswich. Deposit £5 5s. cheque. Tenders by Feb. 29.

Llanelly, Carms.—Construction of a pumping station at the North Dock, and extension of an existing pumping station at Sandy, including rising mains and sewer extensions, for R.D.C. Documents from R. C. Jones, engineer, Castle Buildings, Llanelly. Deposit £5 5s. Tenders by Feb. 18.

Londonderry.—Laying of approximately 1,024 lin. ft. of 9in. diameter stoneware sewer and other incidental works at Dunfield Terrace, Strabane Old Road, for City Council. Documents from the City Engineer and Surveyor, 5 Guildhall Street, Londonderry. Deposit £5 5s. cheques payable to City Accountant. Tenders by Feb. 27.

Luton, Beds.—Minor capital works, East Hyde sewage disposal works, contract I, for B.C. Deposit £2 2s (cheques payable to City Accountant. Tenders by Feb. 26.

Maidenhead, Berks.—Sewage works extension, stage II, contract III, for B.C. Deposit £3.

Tenders by March 10.

Middleton, Lancs.—Construction of approximately 100 lin. yd. of 6in. diameter porous concrete pipe drains and appurtenant works at Boarshaw Cemetery, for B.C. Documents from Engineer and Surveyor, Town Hall, Middleton. Tenders by Feb. 20.

Midlothian.—Construction of 130 lin. yd of 4in. diameter fireclay subsoil drain, five to seven feet deep, at Chapelton Drive, Limefield, West Calder, for C.C. Documents from the County Engineer, 32 Palmerston Place, Edin

West Calder, for C.C. Documents from the County Engineer, 32 Palmerston Place, Edinburgh.

Montgomeryshire.—Domestic improvements and sewage disposal works at Oakwood and Hillfield, Llanfyllin, for C.C. Documents from D. A. Cresswell, land agent, County Offices, Welshpool. Tenders by Feb. 19.

Okehampton, Devon.—Sticklepath sewerage and sewage disposal, for R.D.C., comprising the construction of an ejector station, eight brick and concrete manholes; the laying of approximately 38lyd. of 6in. diameter sewers and 22byd. of 4in. diameter rising main. Documents from the Chief Public Health Inspector, Council Offices, Oaklands Drive, Okehampton. Deposit £2 2s, (cheques payable to R.D.C.). Tenders by March 11.

Rayleigh, Essex.—Soil sewer diversion, Station Crescent/Down Hall Road, for U.D.C., comprising construction of approximately 70 lin. yd. of 9in. diameter glazed stoneware soil sewer and approximately 50 lin. yd. of 9in. diameter steel suspended soil sewer, together with incidental works of manhole construction and alterations. Documents from the Engineer and Surveyor, Council Offices, Rayleigh. Tenders by Feb. 19.

Romford, Essex.—Construction of about 4,500 lin. yd. of 3in. and 6in. land drains, with ancillary works, at Dagnam Park, for B.C. Documents from Engineer and Surveyor, Town Hall, Romford. Deposit £2 2s. (cheque). Tenders by Feb. 23.

Rowley Regis, Staffs.—Construction of approximately 110 lin. yd. of 21in. diameter foul sewer and 55 lin. yd. of 21in. diameter stormwater sewer, together with manholes and ancillary works, at Dudley Road West and Hill Road, Tividale, for B.C. Documents from S. G. Wood, engineer, Municipal Buildings, Old Hill, Staffs.—Deposit £2 2s. Tenders by Feb. 26.

St. Albans.—Making-up, sewering and paving of Mount Drive and The Rise, comprising

Old Hill, Staffs. Deposit £2 2s. Tenders by Feb. 26.

St. Albans. — Making-up, sewering and paving of Mount Drive and The Rise, comprising the following works, for City Council: 1,608 lin. yd of 6in. and 9in. diameter g.s. sewers; 3,208 sq. yd. of bitumen macadam carriageway; 1,897 sq. yd. a.s. paving. Documents from the Engineer and Surveyor, 16 St. Peter's Street, St. Albans. Tenders by Feb. 22.

Skipton, Yorks.—Hebden sewerage and sewage disposal scheme, for R.D.C., comprising construction of approximately 2,278 lin. yd. of 6in. salt glazed ware sewers, 154 lin. yd. 6in. cast-iron sewers and 47 brick manholes, together with the new sewage disposal works, comprising detritus tanks, percolating filters, storm water tanks, humus tanks, sludge drying bays and other appurtenant works. Documents from the Surveyor, Council Offices, Granville Street, Skipton. Deposit £3 3s. Tenders by Feb. 26.

Southam, Worcs.—Following, for R.D.C.:

Offices, Granville Street, Skipton. Deposit £3 3s. Tenders by Feb. 26.

Southam, Worcs.—Following, for R.D.C.: (1) Long Itchington, contract 7—approximately 3,650yd. of 9in. and 6in, diameter sewers, 950yd. of 4in. diameter iron pipe pumping mains, the construction of two pumping stations, two additional bacterial filters, sludge drying beds and incidental work; (2) Priors Marston, contract 1—approximately 3,100yd. of 9in. and 6in. diameter sewers, the construction of treatment works, including pumping station, settling tanks, sludge drying beds and incidental work; (3) Stockton, contract 8—approximately 2,500yd, of 9in. and 6in. diameter sewers and incidental work. Written applications to Richards and Dumbleton, Cornwall Buildings, 45 Newhall Street, Birmingham, 3. Deposit £3 3s. each contract, by cheque, payable to R.D.C. Tenders by Feb. 27.

*Uckfield, Sussex.—Maresfield village sewerage, for R.D.C. Deposit £3 3s., payable to R.D.C. Tenders by March 14.

R.D.C. Tenders by March 14.

*Warwick, War. — Shrewley sewerage and sewage disposal scheme, contract 12, for R.D.C. Deposit £10 10s. (cheques payable to R.D.C.). Tenders by March 28.

Worksop, Notts. — Following, for B.C.: Removal of an existing surface water sewer in Beaver Place, Eastgate and Gateford Road, and its replacement by a new sewer, 39in. to 63in. in diameter; also for the construction of a new surface water sewer in Carlton Road, 24in. to 27in, diameter. Documents from the Borough Engineer, Park House, Worksop. Deposit £5 5s. Tenders by March 2.

STREET LIGHTING

Dartford, Kent.—Group A street lighting, St. Vincents Road, for B.C., comprising supply and erection of 17 complete lighting units, including 25ft, reinforced concrete columns and 400-W MBF/U lamps and lanterns. The work includes removal of existing lighting equipment. Documents from Thos. Armstrong., town clerk, Council Offices, Dartford. Deposit £2 2s. Tenders by Feb. 16.

Newcastle-under-Lyme, Staffs.—Supply, delivery and installation of 23 200-W sodium vapour group A lighting units, including 30ft. mounting height plain tubular steel columns, 200-W sodium lanterns, lamps and ancillary equipment, for B.C., on the north of Newcastle-under-Lyme-Nantwich-Tarporley - Tarvin trunk road A.52. Documents from the Engineer, Lancaster Building, High Street, Newcastle. Tenders by March 7.

INTERNATIONAL CONTRACT

INTERNATIONAL CONTRACT

Nyasaland.—Supply, delivery and erection of pumping plant in the Blantyre district for contract III of the Walker's Ferry scheme, for Mudi River Water Board, comprising the supply, delivery and erection of the following electric motor-driven pumping equipment: (1) Submersible pump/motor sets or spindle-driven borehole pump/motor sets to pump raw water; four units; voltage 400; capacity water for the maximum numping head 130ft; controls of the pump/motor sets or spindle-driven borehole pump/motor sets to pump raw water; four units; voltage 400; capacity 41,750 g.p.h.; maximum pumping head 130ft.; (2) high lift pump/motor sets to pump treated water at Walker's Ferry; two units; voltage 3,300; capacity 41,750 g.p.h. maximum pumping head 1,385ft.; (3) high lift pump/motor sets to pump treated water at Chileka; two units; voltage 3,330; capacity 41,750 g.p.h.; maximum pumping head 1,350ft.; (4) medium lift pump motor sets to pump treated water at Soche; two units; voltage 400; capacity 41,750 g.p.h.; maximum pumping head 330ft. The contract also includes the supply, delivery and erection of electric motor starters, instruments and controls, raw water screens, station valves, sluices and pipework and other ancillary equipment. Documents from Scott and Wilson, Kirkpatrick and Partners, consulting engineers, 47 Victoria Street, London, S.W.I. Deposit £20, in the form of a banker's draft, payable to the Board. Tenders by May 10.

AWARDS

BUILDING AND DECORATING

BUILDING AND DECORATING
(See also Housing Schemes)

Acton, Middx.—Erection of new cold store at Atlas Road, for T. Wall and Sons, Ltd. J. Stanley Beard, Bennett and Wilkins, architects, National Bank House, 101-103 Baker Street, London, W.1: Sir Robert McAlpine and Sons, Ltd., 80 Park Lane, S.W.1 The store will be built on new-type drilled cylindrical concrete foundations created by Economic Foundations, Ltd., 161 Victoria Street, S.W.1.

Barnsley, Yorks.—Development of Mount Vernon Hospital, for Sheffield Regional Hospital Board: Arthur Waterman, Ltd., Moorland Works, Gelderd Road, Leeds, 12, £224,062 (recommended).

Belfast.—Erection of offices, a drill hall, officers', sergeants' and other ranks' messes, etc., at Territorial Army Centre, Girdwood Park, Antrim Road. Smyth and Cowser, architects, 31 College Gardens, Belfast: Hogg Bros., 35a Glenbank Place, Belfast. Estimated cost £110,000.

Bournemouth, Hants.—Redevelopment of Bowmaker, Ltd., Jackson and Greenen, architects, Hinton Buildings, Hinton Road; James Drewitt and Son, Ltd., Ringwood Road, West Howe, Bournemouth, £366,992.

Rebuilding and extending banking premises, Old Christchurch Road, for Midland Bank, Ltd. Whinney, Son and Austen Hall, architects, 37 Norfolk Street, Strand, London, W.C.2: James Drewitt and Son, Ltd., Ringwood Road, West Howe, Bournemouth, £4167.

Extensions to factory at Francis Avenue, West Howe, For May Factor and Co

London, W.C.2: James Drewitt and Son, Ltd., Ringwood Road, West Howe, Bournemouth, £64.167.

Extensions to factory at Francis Avenue, West Howe, for Max Factor and Co. James Drewitt and Son, Ltd., Ringwood Road, West Howe, Bournemouth, £39,833 (negotiated contract).

Erection of lift shaft and installation of staff/goods lift at Beales, for J. E. Beale, Ltd. Jackson and Greenen, architects, Hinton Buildings, Hinton Road: James Drewitt and Son, Ltd., Ringwood Road, West Howe, Bournemouth (negotiated contract). Estimated cost £10,000.

Bristol.—Following works, for City Council: Erection of public conveniences at Redcatch Park and Hillfields recreation ground—Direct Labour (recommended). estimated cost £2,600 and £2,800, respectively. Rebuilding of the brickwork to the No. 2 chamber of the twin cremator at Canford crematorium—Dowson and Mason, Ltd., Alma Works, Manchester, 19 (recommended). Estimated cost £750.

Chelsea.—Major repairs, redecorations and minor improvements at Marlborough Primary School, for L.C.C.: Hotson Bros., Ltd., 37 Balham Park Road, London, S.E.12, £20,933 (accepted); Buckingham and

Sons, Ltd., £21,759; A. H. Franklin and Son, Ltd., £22,468; Collis and Co., Ltd., £22,690; S. C. Grover, Ltd., £25,762; E. J. Lacy and Co., Ltd., £25,983; Sims and Russell, Ltd., £27,986.

Cheltenham, Glos.,—Following works, for B.C. Erection of public conveniences at the shopping centre, Edinburgh Place: Ford and Weston, Ltd., 34 Imperial Square, Cheltenham, £3,282; redecoration of hangar S.E.I at the airport: B. D. Gibbs and Son, Ltd., £683 (recommended).

Chichester, Sussex.—Erection of a staff hostel unit at St. Richard's Hospital, for South West Metropolitan Regional Hospital Board: C. W. Pile, Ltd., Pound Farm Road, Chichester, £14,783 (recommended).

Dundee.—Erection of repair and sales depot at Kingsway West, for Oswald Tillotson, Ltd., Summit Works, Burnley, Lancs.: The Kelvin Construction Co., Ltd., Lockburn Road, Maryhill Road, Glasgow, N.W. Fulham.—Improvements to sanitary accumended in a Construction of Construction

Road, Maryhill Road, Glasgow, N.W.
Fulham.—Improvements to sanitary accommodation at Queen's Manor Primary School, for L.C.C.: A. H. Franklin and Sons, Ltd., 261 Lillie Road, London, S.W.6, £5,354.
Gateshead, Dur.—Bakery extensions on Team Valley trading estate for Hunters the Bakers, Ltd.: Lowton Construction Co., Leigh, Lanes, £180,000. Work commenced.

Leigh, Lancs., £180,000. Work commenced.

Great Yarmouth, Norfolk.—Construction of 20 garages and hardstanding at Western Road, Gorleston, for B.C.: H. A. Holmes and Sons, Ltd., South Ice House Hill, Gorleston, Great Yarmouth, £3,550 (recommended, subject to Ministry approval).

Grimsby, Lincs.—Erection of boilerhouse at Scartho Road Hospital, for Sheffield Regional Hospital Board: H. Faulkner, Ltd., 47a Yarborough Street, Grimsby, £3,835 (recommended).

Guildford, Surrey.—Erection of Civic Hall, for B.C. Architect is Peter Shepheard of Bridgwater and Shepheard, 42 Bruton Place, Berkeley Square, London, W.1; Dove Bros, Ltd., Cloudesley Place, London, N.I, £230,097. Work expected to commence in April.

April.

Haverfordwest, Pembs.—Erection of county health police headquarters with county health offices, clinic, ambulance station and four houses, and the New Tasker's Girls' School, for C.C. Lt.-Col. Walter Barrett, county architect: William Eaves and Co., Ltd., Marton, Blackpool. Estimated cost £280,000.

t280,000.

Haverhill, Suffolk.—Erection of a block of eight garages together with a concrete apron and other ancillary works at Western Avenue, Parkway estate, for U.D.C. I. H. Seeley, engineer and surveyor: M. H. K. Brown, Linton, Cambs., £1,513. Work commencing April.

Hertford.—Redecoration of the ground floor at The Castle (in two stages), for B.C.: Direct Labour (recommended). Estimated cost £1,000.

Horden, Dur.—Alterations to provide garage and warehouse at Horden, for the Sherburn

Direct Labour (recommended). Estimated cost £1,000.

Horden, Dur. — Alterations to provide garage and warehouse at Horden, for the Sherburn Hill Co-operative Provision Society. Plans by the C.W.S. Architects' Department, 90 Westmorland Road, Newcastle upon Tyne. C.W.S. Building Department Benton Road, Newcastle upon Tyne. Huntingdon.—Erection of a depot at Alconbury for the Council's vehicles, for R.D.C. The structure is of brickwork with an asbestos-cement roof. K. A. Milner, architect, of Lea, Milner and Wardley, 4 Market Hill: R. Storey, 11 Rusts Lane, Alconbury, Hunts., £3,711 (accepted): Hale Bros., £4,436; Pettits, Ltd., £4,335; F. C. Whittaker, £4,345; George Wrycroft and Sons, £5,598.

Kirkby, Lancs. — Supply and erection of one aluminium alloy greenhouse, approximate size 50ft. long by 12ft. wide, including all glazing, staging and an oil-burning heating system (the building of the boiler house and the brick foundation to the greenhouse does not form part of this contract), for U.D.C.: Plant house—Waldor Tool and Gauge Co., Ltd., Droitwich, Wores.; heating equipment—Brightside Heating and Engineering Co., Ltd., Liverpool, 8. Work commencing March.

Knottingley, Yorks.—Erection of a pavilion and public conveniences in the Knottingley playing fields, for U.D.C. G. J. Laverick, engineer and surveyor; R. H. Fullwood, 2 Doncaster Road, South Elmsall, near Pontefract, £2,075. Work commencing March I. Lambeth.—Erection of a four-storey factory building and alterations to existing adjoining premises at Lambeth Street. London, E.I. for Metropolis Press, Ltd. Plans provide for reinforced concrete frame construction with curtain walling, a ground floor of suspended construction and foundations consisting of ground beams on a system of piles. The main structure will be about 135ft. by 30ft. and 44ft. to parapet. Desmond Burniston, architect, 12 Bolton Street, London, W.I. Leonard and Grant,

consultants, 171 Victoria Street, S.W.1:
Martin Cowley, Ltd., 112 Jermyn Street,
S.W.1. Estimated cost £80,000.

consultants. 171 Victoria Street, S.W.1: Martin Cowley, Ltd., 112 Jermyn Street, S.W.1. Estimated cost £80,000.

Leeds. — Following works, for City Council: Erection of one block of eight and one block of nine brick-built garages at Cranmer Close, Moortown, and one block of four brick-built garages at South Parkway—George Monkman and Son, Ltd., Nowell Lane, Leeds, 9, £3,646; erection of one block of six and one block of 10 brick-built garages on the Cardinal Crescent estate—H. Johnson and Sons (Farsley), Ltd., New Street, Farsley, Pudsey, £2,247; 24 concrete garages in four blocks at Chetwynd Street, Jack Lane—Marley Concrete, Ltd., Sevenaks, Kent, £2,576.

Alterations and additions to Ireland Wood police station—George Monkman and Son, Ltd., £7,180; reroofing of machine shop at Kirkstall Road works—Wm. Airey and Son (Leeds), Ltd., Eldon House, Leeds, 2, £5,434 (all recommended).

Liverpool.—Following works, for City Council: Redecoration at rates office in Municipal Buildings: William Moss and Sons, Ltd., 4 Roscoe Street, Liverpool, 1, £1,850; repairs, decorations and provision of bathroom and domestic hot water supply, etc., at 93a Sandy Lane—G, N. Rowlands (Contractors), Ltd., 495 Rice Lane, Liverpool, 6, £2,100: repairs, decorations and conversion of 37 Canning Street, into three self-contained flats—A, and E. Hindley Bros., 2 Grange Street, Rocky Lane, Liverpool, 6, £2,100: repairs, decorations and provision of bathroom and hot water supply, etc., at 24 Sir Howard Street—S. Hayes, 5 Peel Place, Liverpool, 8, £548; erection of nursery accommodation at Sandfield Park School—Frederick Clark and Sons, Ltd., 191 Heywood Street, Liverpool, 5, £7,794 (all recommended).

School—Frederick Clark and Sons. 1td... 191 Heywood Street, Liverpool, 5, £7.794 (all recommended).

Manchester. — Following works, for City Council: Erection of Victoria Park Secondary School—G. and J. Seddon, Ltd.. Little Hulton, sub-contractors—asphalting—Neuchatel Asphalte Contracting, Ltd.. Salford; lightweight roofing — Cawood Wharton and Co., Ltd.. Harrogate; flat roofing—D. Anderson and Son, Ltd.. Stretford; adaptation of kitchen at Broome House—I. Shaw and Sons (Knutsford). Ltd.. Bexton Lane, Knutsford, sub-contractors—asphalter — James Rush, Manchester; plasterer—Hatton and Co., Mobberley; painter—R. Barrow, Knutsford.

Sub-contracts for extension to eightform entry at Plant Hill Secondary School—glazing work—Faulkner Greene and Co.. Ltd.. 16 Marshalsea Road, London. S.E.1: wall and floor tiling—Manchester Wall and Flooring Co., 309 Trafford Road, Manchester, 17.

Erection of superstructure of control and administration building for the Arnfield treatment plant at Longdendale—Simon Carves, Ltd., Stockport.

Erection of an old people's home at Newall View, Wythenshawe—G. and J. Seddon, Ltd., Little Hulton.

Middlesbrough, Yorks.—Erection of warehouses. offices, etc., for Middleton and Co.. Ltd. J. C. Lawrence and Partners, architects. Post Office Buildings, 26 Brown Street. Manchester, 2; Charles Tennet and Co., Church Road, Stockton-on-Tees.

Morpeth. Northumb.—Construction of new Council chamber in Dacre Street, for R.D.C. I. R. Miles, surveyor: Ashington Industrial Co-operative Society (Building Department). Ashington, £6.499

Northallerton, Yorks.—Erection of petrol filling station at Romanby: Walter Thompson Ltd North End Northallerton.

Ashington, £6.499
Northallerton, Yorks.— Erection of petrol filling station at Romanby: Walter Thompson, Ltd., North End, Northallerton.
Norwich.—Construction of five garages and an open car park at St, Mildred's Road, Earlham (West) housing estate, for City Council: Ford and Carter, Ltd., Baltic House, Mountergate, Norwich (recommended, extension of contract), estimated cost £950.
Nottingham.—Alterations, and extensions to

cost £950.

Nottingham.—Alterations and extensions to E.N.T. department in Ropewalk Block, at General Hospital, for Sheffield Regional Hospital Board; William Woodsend, Ltd., Castle Boulevard, Nottingham, £3,242

Castle Boulevaru, (recommended).

Peterborough.—Erection of block of shops at Gunthorpe housing estate, for City Council I. Bentley, 21 High Street, Eve. £16.689 (recommended, subject to Ministry ap-

Romford, Essex.—Erection of a social hall in Tweed Way. Rise Park, for B.C.: Selleck Nicholls and Co.. Ltd., Hill House, East Hill, St. Austell, Cornwall, £14,903 (recommended).

mended).

Rotherham, Yorks.—Builders' work for central heating blocks A. B and part E at Moorgate General Hospital. For Sheffield Regional Hospital Board: A. Cooper and Sons, Ltd., Rotherham, £4,465 (recommended).

Sheffield.—Following, for City Council: Erection of hose tower at Fire Station 5, Elm Lane—Direct Labour, estimated cost £3,600; erection of Hinde House Secondary School for Girls— J. W. Sivil, Ltd., 39 Canterbury Avenue, Sheffield, 10, £198,162; alterations and improvements at All Saints' School—B. Powell and Son, Ltd., 37 Cavendish Street, Sheffield, 3, £19,142; repair and improvements at Northwood Cottage, Sydnope estate, and Thryft House Farm, off Ringinglow Road—Direct Labour, estimated cost £720 and £1,246, respectively; improvements at Priest Hill. Farm, Whiteley Woods, and Chase Farm, Loxley—Wilson and Middleton, 101 Leigh Street, Sheffield, 9, £1,340, and S. L. Clark, Ltd., 400 Sandygate Road, Sheffield, 10, £830, respectively; reflooring of the Orchard Place Maternity and Child Welfare Centre—Letce Floors and Tiles, Ltd., Crowtree Works, Broomhall Street, Sheffield, 3, £2,674; partial demolition of caretaker's house at Johnson Memorial Home and adaptation of ground floor to provide additional garage accommodation—Direct Labour, estimated cost £1,000; repairs, etc., 18-28 (even), 1-3 (consecutive) in Court 6, and 1-3 (consecutive) in Court 6, and 1-3 (consecutive) in Court 8, Talbot Road—E. Close, Ltd., 1 Stalker Place, Sheffield, 11, £1,533; 36, 38 and 40, and 1, 2 and 3 in Court 4, Surbiton Street—Ackroyd and Abbott, Ltd., 47 Willoughby Street, Sheffield, 4, £1,269 (all recommended).

Shirley, Surrey.—Erection and rebuilding works, including workshops an assembly hall, gymnasium, speech and physiotherapy departments, etc., at Coombe Farm, Oaks Road, for National Spastics Association Centre. D. M. Evans, architect, 5 Bucking-ham Place, Westminster, S.W.1: J. and C. Bowyer, Ltd., Haynes Lane, London, S.E.19, £41,431. Work to start shortly.

Smethwick, Staffs.—Conversion of the toilet adjacent to the main entrance of the original building at Hill Crest into a superintendent's office and the redecoration of the hall, staircase, landings and 19 rooms, for B.C.: A Seers and Sons, Ltd., 144 Broad Street, Bi

B.C.: A Seers and Sons, Ltd., 164 Broad Street, Birmingham, 15, £569 (recommended).

South Tipperary.—Erection of a hall, including a library, museum, assembly hall and U.D.C. offices, for C.C.: Hogan Bros., Croke Street, Thurles, £39,000.

Stepney.—Erection of a home for the aged at Exmouth Street, for L.C.C.: O. Hammond and Miles, Ltd., Ilford, Essex, £85,283; Griggs and Son, Ltd., £86,928; C. P. Roberts and Co., Ltd., £87,255; F. R. Hipperson and Son, Ltd., £88,205; J. M, Hill and Sons, Ltd., £88,205; J. M, Hill and Sons, Ltd., £88,250; Rowley Bros., Ltd., £89,786; A. Webb (Builders), Ltd., £90,020; Leslie and Co., Ltd., £91,624; Killby and Gayford, Ltd., £92,243.

Stockport, Ches.—(a) Erection and (b) design and supply of steel reinforcement for Newlands old people's home, for B.C.: E. E. Coleman, Ltd., Waverley Road Works, Sale, £63,972, and Truscon, Ltd., Seymour Grove, Manchester, 16, £837, respectively (recommended).

Swindon, Wilts.—Construction of toilets at Coate Water, for B.C.: Clark Bros., Oxford Road, Swindon, £6,038 (recommended).

Tynemouth, Northumb.—Office block, canteen. etc., at new terminal, for the Esso Petroleum Co., Ltd. Cruickshanks and Seward. architects, 196 Deansgate, Manchester: Hastie D. Burton, Ltd., King Street, North Shields Shields.

Hastie D. Burton, Ltd., King Street, North Shields.

Wallasey, Ches.—Erection of the following, for B.C.: (a) Sports pavilion at Wallacre recreation ground and one terrace of three houses and one detached house on sites in the immediate vicinity; (b) police substation, first-aid post, lost children's shelter and public shelters, Wallasey Beach. W. P. Clayton, borough architect: (a) James Tomkinson and Co., Ltd., 22 Roscommon Street, Liverpool, 5, and (b) Bird and Harrop, 4 Dacre Street, Birkenhead.

Wandsworth.—Erection of a primary school at Albert Drive and Princes Way, near Wimbledon Parkside, for L.C.C.: Halse and Sons, Ltd., 5 Chapel Hill, London, S.E.18, £51,982 (accepted): Rice and Son. Ltd., £52,276; Token Construction Co., Ltd., £52,222; Kirk and Kirk, Ltd., £52,529; Thomas and Edge, Ltd., £52,610; W. J. Simms. Sons and Cooke, Ltd., £53,264; Rowley Bros., Ltd., £55,450; Bernard Sunley and Sons, Ltd., £56,814.

Weymouth, Dorset.—Provision of beach chalets at the Sluice Gardens, for B.C.: W. G. Taylor and Sons, Boot Hill, Weymouth, £14,945 (recommended).

Whitton, Middx.—Erection of a hall with nin houses and eight garages at Nelson Road.

whitton, Middx.—Erection of a hall with nine houses and eight garages at Nelson Road, for Lawrence Masters, 33 Ryecroft Avenue. Whitton: Paul Lawrence and Son, Ltd.. 270-276 Bath Road, Hounslow, £19,300. Work to commence in March.

Wolverhampton, Staffs.— Supply and erection of timber superstructure of greenhouse at Bushbury Crematorium, and terrazzo work at Whitmore Street public conveniences—Direct Labour, £741, and Phillip Cecconi and Son, 80 Ryland Road, Calthorpe, Birmingham, 15, £741, respectively (recommended).
Woolwich.— Construction of the foundations and superstructure of 18 unit factories at Woolwich industrial estate, for L.C.C.: Bernard Sunley and Sons, Ltd., 25 Berkeley Square, London, W.1, £134,562 (accepted); Rice and Son, Ltd., £133,159; Leslie and Co., Ltd., £139,149; The Unit Construction Co., Ltd., £139,150; Thomas and Edge, Ltd., £414,547; W. J. Marston and Son, Ltd., £146,933; Richard Costain, Ltd., £150,265; Ford and Walton, Ltd., £151,420; The Demolition and Construction Co., Ltd., £156,423.
Worcester.—Erection of the first instalment

Demolition and Construction Co., Ltd., £156,423.
Worcester.—Erection of the first instalment of the new teachers' training college, for City Council: Spicers (Builders), Ltd., Ombersley Road, Worcester, £384,676 (recommended, subject to M.E. approval).
Worksop, Notts.—Pathology laboratory and out-patients' department at Victoria Hospital, for Sheffield Regional Hospital Board: J. E. Smith, Ltd., Kilton Road, Worksop, £22,502 (recommended).

CLOTHING AND TEXTILES

CLOTHING AND TEXTILES

Hereford.—Supply of workmen's overalls, for City Council: John Manning and Son, Eign Street, Hereford, £770 (recommended).

Leeds.—Supply of 1,000 khaki uniform drill tunics for drivers and conductors, for City Council: Castlemere Manufacturing Co., Ltd., 325 City Road, Manchester, 15, £843 (recommended).

Swindon, Wilts.—Supply of uniforms (transport department), for B.C.: Briggs, Jones and Gibson, Ltd., Newcastle-under-Lyme. Staffs., £994 (recommended).

DEMOLITION

DEMOLITION

Barrow-in-Furness, Lancs,—Demolition of the existing Non-Conformist chapel at the cemetery, for B.C.: Direct Labour (recommended, subject to Ministry approval). Estimated cost £1,000.

Cheltenham, Glos.—Demolition of chimney at Arle Road depot, for B.C.: V. G. Morris, Ltd., £266 (recommended).

Downham Market, Norfolk.—Demolition of cottages at Bennett Street, for U.D.C.: E. W. Bates, £25 (accepted, subject to Ministry approval): P. J. Boughen, £50; W. Monsey, £30; Warren Bros., £60; J. H. Cross and Son, £105; S. G. and C. Quarries, £125; K. B. Hinson, £200; A. King, £300.

Peterborough.—Demolition of properties in Westwood Street, for City Council: R. Mease, £460 (recommended, subject to Ministry approval).

Sheffield.—Demolition of following, for City Council: City Training College, Wood-ville—Direct Labour, £500; former licensed premises known as Havana Hotel, Meadow Street—Sheffield and Rotherham Dismantling Co., 114 Abbeyfield Road, Sheffield, £70 (both recommended).

Sowerby Bridge, Yorks.—Demolition of a chapel at Sowerby Bridge Cemetery, for U.D.C. Keith Robson, engineer and surveyor: N. Fearnley, 36 Moorclose Avenue, Queensbury, Bradford, £34.

Stockport, Ches.—Demolition of air raid shelter at Fernley Road, for B.C.: Seaton and Bailey, Ltd., £42 (recommended).

Stoke-on-Trent, Staffs.—Demolition of Sheridan Works, Longton, and delicensed premises, Market Inn, Butterfield Place, Tunstall, for City Council: G. Baskerville, Martin Street. Cobridge, Stoke-on-Trent, £700 and £54, respectively (recommended).

Swindon, Wilts.—Demolition of two cottages at Church Farm, for B.C.: N. J. Francombe and Son, £85 (recommended).

West Bromwich, Staffs.—Demolition of airraid shelters 246 and 250, rear of 185. Walsall Street, for B.C.: J. Chapman, 195 Belgrave Road, Birmingham, 19, £90.

ELECTRICAL

ELECTRICAL

Cheltenham, Glos.—Installation of traffic signals at Gloucester Road/High Street/Townsend Street, for B.C.: S.G.E. Signals, £1.278 (recommended).

Durham.—Electrical installation at new branch library, for Co. E.C.: F. E. White. West Cornforth, £1,844.

Felling, Dur.—Electrical installation at Leam Lane New Modern School, for Co. E.C.: T. Mitchelson (Electrical), Ltd., Gateshead, £6,835.

Fencehouses, Dur.—Electrical installation for additions to Shiney Row County and Modern Schools, for Co. E.C.: Hodgsons (Houghton-le-Spring). Ltd., Houghton-le-Spring, £742.

reat Yarmouth, Norfolk.—Supply of new traffic signals for Feathers Plain, Gorleston, for B.C.: Siemens and General Electric Railway Signal Co., Ltd., East Lane, North Wembley, Middx., £1,322 (recommended).

Wembley, Middx., £1,322 (recommended).

Manchester. — Following works, for City Council: Electrical installation in the control tower and domestic flights wing of new terminal building at Manchester Airport and the new Courts of Law—F. Wall and Co., Ltd., Oldham, and S. H. Heywood and Co., Ltd., Manchester, respectively.

Newcastle upon Tyne. — Improvements to the electric lighting at Heaton Grammar and High Schools, for E.C.: Robson and Coleman, Simpson Street, Newcastle, £2,587.

Sheffield.—Installation of bed lift in detached block for female patients at Middlewood Hospital, for Regional Hospital Board: Etchells, Congdon and Muir, Ltd., 25 Mill Street, Manchester, 4, £4,818 (recommended).

mended).

Rauceby Hospital, for Sheffield Regional Hospital Board: Grantham Electric Engineering Co., Ltd., 6 Wharf Road, Grantham, £13,756 (recommended).

Stockport, Ches.—Electrical installations at Hollywood Park Primary School, for B.C.: W. Toovey. 41 Church Road, Gatley, Cheadle, £1,851 (recommended).

Swindon, Wilts.—Electrical rewiring and lighting improvements at Westcott Secondary and Infants' Schools, for B.C.: Lee, Beesley and Co., Ltd., Twyer Works, Millbrook Street, Gloucester, £2,644 (recommended).

FENCING

Leeds.—Supply and erection of chain link fencing at Knostrop sewage disposal works, for City Council: Proctor Bros. (Wire-works), Ltd., Monkbridge Mills, Whitehall Road, Leeds, 12, £1,301 (recommended).

Road, Leeds, 12, £1,301 (recommended).

Liverpool. — Erection of boundary fencing at Cathedral Gardens, for City Council: Supplying and laying of approximately 62 lin, yd. of reconstructed stone plinth and erecting railings—W. Thornton and Sons, Ltd., 38 Wellington Road, Liverpool, 8, £7,100; supply of approximately 625 lin, yd. of wrought-fron railings—Thomas Bowen, Ltd., Bowen Street, Parkfields, Wolverhampton, £3,856.

GAS AND WATER SUPPLY

Consett, Dur.—Construction of a reservoir with a capacity of 11,000,000,000 gallons on a site five miles west of Consett, for the Sunderland and South Shields Water Co. A. G. McLellan, general manager: John Mowlem and Co., Ltd., 91 Ebury Bridge Road, London, S.W.l. Estimated cost £5µm.

Durham.— Construction of a two-mile water main from Mosswood to Castleside service reservoir in the Derwent Valley, for the County Water Board: Direct Labour, 133,000 £133,000.

£133,000.

ast Devon.—Supply and installation of an electrically powered stand-by pump for Pinhay pumping station, contract P6, for East Devon Water Board: J. A. N. McGeoch. chief engineer: Sulzer Bros. (London), Ltd., Sun Foundry, Dewsbury Road, Leeds, 11, 6270.

f. 1970.

Grimsby, Lincs.—Harbrough scheme, contract H.3, for North East Lincolnshire Water Board, comprising the laying only of approximately 4½ miles of 24in. diameter prestressed concrete pipes and 1½ miles of 18in. diameter asbestos-cement pipes across country approximately 10 miles north-west of Grimsby. Cyril Cooper, engineer and manager: Squire W. Swift, Ltd., Selby, Yorks., £32,151. Work just commenced.

Hertford.—Construction of new reservoir and

Yorks. £32,151. Work just commenced.

Hertford.—Construction of new reservoir and high pressure water main, for B.C.: Davis Contractors, Ltd., 346-350, Kilburn High Road, London, N.W.6, £61,815 (recommended); Stirton Partners, Ltd., £63.282; Biggs, Wall and Co. (Hitchin), Ltd., £65,970; T.H. Contractors, Ltd., £70,600: M. J. Gleeson (Contractors), Ltd., £71,136: Gee. Walker and Slater, Ltd., £71,994; Howard Farrow, Ltd., £82,772; Gabriel (Contractors), Ltd., £84,717.

Ltd., £84,/17.

Leamington Spa, War.—First part of the works for conversion of the boiler house at Campion Terrace pumping station and installation of new filters and pumps. for B.C.: Martin Peyton and Co., Ltd., 9 Newborough Road, Shirley, Birmingham, £6.878 (recommended).

Leeds.—Following works for City Company.

(recommended).

Leeds.—Following works, for City Council:
Supply of automatic booster pumping plant for multi-storey flats at Ebor Gardens
—Worthington-Simpson, Ltd., 39 Otley
Road, Leeds, 6, £1,643.
Sub-contractors for filtration works and pumping station at Eccup, for City

Council: steel partitioning—Sankey-Sheldon, Ltd., 48 Wellington Street, Leeds. 1, £683; steel windows—Henry Hope and Sons, Ltd., Provincial House, Albion Street, Leeds, 1, £2,639; multiple covers—Broads Manufacturing Co., Ltd., Torre Road, Leeds, 9 (all recommended).

Liverpool.—Supply of valves for construction of works at Huntington and the aqueduct from Huntington to Norton water tower, for City Council: J. Blakeborough and Sons, Ltd., Brighouse, Yorks., £35,366, and Guest and Chrimes, Ltd., Rotherham, £1,517 (recommended).

Loughborough, Leics.—Laying of 300 lin. vd.

(recommended).

Loughborough, Leics.—Laying of 300 lin. yd. of 9in. sludge main, 1,500 lin. yd. of 4in. water main and 2,200 lin. yd. of 3in. water main and the carrying out of incidental works, for B.C.: T. E. Steed, Edwinstowe. Mansfield, £2,640 (recommended).

Newark, Notts.—Water main extensions at Station Road and Cottage Lane, Collingham, and New Lane, Girton, for R.D.C.: Direct Labour.

Station Road and Cottage Lane, Collingham, and New Lane, Girton, for R.D.C.: Direct Labour.

Newtown and Llanidloes, Monts.—Clatter and Pontdolgoch water supply scheme, for R.D.C., comprising the laying of approximately 6,550yd. of asbestos-cement and 50yd. of spun-iron water mains, 3in. diameter, with specials and fittings, together with the construction in mass concrete of a second compartment to an existing reservoir to provide additional storage capacity of 15,000 gallons. W. Herbert Bateman and Partners, consulting engineers, Chesterfield House, Batheaston, Bath, Som.: Buttington Road Rolling Co., Ltd., Min-y-Nant, Trewern, Welshpool, £13,657. Work to commence April 1.

Swindon, Wilts.—Supply and erection of submersible pumping plant for 4 borehole at Latton Waterworks, for B.C.: Sulzer Bros. (London), Ltd., 31 Bedford Square, London, W.C.1, £7,974 (recommended).

HEATING AND VENTILATING

HEATING AND VENTILATING
Chadderton, Lancs.—Extensions to the heating systems at the Town Hall and health office and the installation of oil-fired boilers, for U.D.C. F. W. Pexton, engineer and surveyor: Harry Taylor, Ebenezer Street, Ashton-under-Lyne, Work commencing June.

Leeds.—Central heating and domestic hot water supply installations at Ireland Wood police station, for City Council: G. Pearson and Co. (Steam Fitters), Ltd., 30 Carlton Street, Leeds, 2, £808 (recommended).

Leeds.—(a) Heating, h.w.s. steam and con-

Street, Leeds, 2, £808 (recommended).

Leeds.—(a) Heating, h.w.s., steam and condense, gas, piped medical gas and ventilations, and/or (b) electrical installation at the Thoracic Centre, Killingbeck Hospital, York Road, for the Leeds Regional Hospital Board. Ernest Griffiths and Son, consultant engineers, Kinders, Bromborough, Ches.: (a) The Modern Heating Co. (Button), Ltd., New Lane, Meadow Lane, Leeds, 11, £18,062; (b) Francis L. Bampton, Ltd., Kelvin Works, Ducie Street, Manchester, 1, £8,007.

Liverpool.—Supply and installation of oil firing

Manchester, 1, £8,007.

Liverpool.—Supply and installation of oil firing equipment to boiler at Burroughs Garden Baths, for City Council: Hamworthy Engineering, Ltd., Poole, Dorset, £2,855 (recommended).

Mansfield, Notts.—Central heating, hot water services and replacement of gas boilers at Forest Hospital, for Sheffield Regional Hospital Board: Patridge Davis and Co.. Ltd., Langwith Junction, Mansfield, £14,431 (recommended).

Mexhorough, Yorks.—Alterations to boiler plant and services at Montagu Hospital, for Sheffield Regional Hospital Board: G. W. Dawes and Sons, Ltd., Sheffield, £2,589 (recommended).

(recommended).

(recommended).

Nelson, Lancs. — Provision and erection of a heating and ventilating unit and ancillary equipment at works department in Charles Street, for B.C.: Wanson Co., Ltd., £1,305 (recommended).

£1,305 (recommended).

Stockport, Ches.—Heating installations at Taxal Lodge School extensions, for B.C.: I. H. Hicks and Co., Ltd., Richard Street, Stockport, £687 (recommended).

Swindon, Wilts.—Supply and installation of a boiler at the Commonweal Grammar School, for B.C.: North Wilts, Sanitary and Heating Co., Ltd., Newport Street, Swindon, £550 (recommended).

Wolverhampton, Staffs.—Hot and cold water installation to houses in the Vauxhalls redevelooment area, for B.C.: D. Wiseman and Bros., Ltd., Showell Road, Wolverhampton, £10,569 (recommended).

HOUSING SCHEMES

Barrow-in-Furness, Lancs.—Construction of two gas and two electrically heated houses at Redwater Gardens, for B.C.: Direct Labour, £7,917 (recommended).

Cumbernauld, Lanarks.—One hundred and forty-six terrace houses and 102 garages in the northern section of the town, for B.C. Atholl Houses, Ltd., 29 Park Circus, Glasgow, C.3. Estimated cost £266,000.

Downham Market, Norfolk.—Following works, for U.D.C. I. Owen Bond and Son, architects, St. Faith's House, Mountergate, Norwich: 28 houses at Paradise Road-I. H. Cross and Son, Hempfields, Littleport, Ely, Cambs., £43,967 (accepted, subject to Ministry approval); O. Staines and Son, £45,841; A. King, £47,317; Warren Bros., £48,254.

Three bungalows at Benerative Bros.

£48.224.

Three bungalows at Bennett Street—
J. H. Cross and Son, £3.814 (accepted, subject to Ministry approval); Barker Bros,
£3,730; P. J. Boughen, £3,864; A. King,
£3,973; Warren Bros., £4,226.

£3,973; Warren Bros., £4,226.

Durham.—Twenty houses at Leamside, for R.D.C.: J. F. Willis, housing architect, Byland Lodge: Direct Labour, £28,836.

Felling, Dur.—Twelve bungalows in Falla Park Road, for U.D.C. R. Morton, surveyors: Direct Labour, £15,384.

Hartlepool, Dur.—Fifty houses north of King Oswy Drive, for B.C.: Direct Labour.

traditional houses and 88 garages at Redhill estate, for City Council: Selleck Nicholls and Co., Ltd., Hill House, East Hill, St. Austell, Corn., £167,937 (recommended, subject to Ministry approval).

Hill, St. Austell, Corn., £167,937 (recommended, subject to Ministry approval).

Houghton-le-Spring, Dur. — Thirty-six houses on Burnside estate, 12 flats at Chandlers Row. and 12 flats at Fatherley Terrace, for U.D.C. A. Veitch, surveyor: Direct Labour (subject to Ministry approval).

Leeds.—Following works, for City Council: 201 new traditional dwellings at Ebor Gardens, stage II—Reema (Chesterfield). Ltd., Storforth Lane, Chesterfield, Derbys., £351,470; 42 dwellings on the Swinnow estate, and 46 on the Moor Grange estate—N. B. Bell and Co., Ltd., Frankland Terrace, Leeds, 7, £110,384 (recommended, subject to Ministry approval).

Eighty-five dwellings on land off Stonegate Road as second part of stage II of the Queenshill housing Association—N. B. Bell and Co., Ltd. Estimated cost £131,264. Liverpool.—Following works, for City Council: Six flats at junction of Ministry

and Co., Ltd. Estimated cost £131,264. Liverpool.—Following works, for City Council: Six flats at junction of Muirhead Avenue and Culme Road—R. J. Barton and Sons. Ltd., Altear Road, Formby. £10.047; four houses at Runton Road. Lee Park estate—W. L. Murphy and Co., Ltd., 3 Kirkstone Road North, Litherland, Liverpool. 21, £11,765 (recommended, subject to Ministry approval).

Kirkstone Road North, Litherland, Liverpool. 21, £11,765 (recommended, subject to Ministry approval).

Conversion of 168 Chatham Street, into three self-contained flats and sundry repairs and decorations—S. Hill and Co., Ltd., Bennison Drive, Liverpool, 19, £1,675 (recommended).

Loughborough, Leics.—Thirty flats at Pinfold Street, contract 78, for B.C.; C. W. and A. L. Hughes, 102 Baggrave Street, Leicester, £43,617 (recommended).

Luton, Beds.—One hundred and fifty-eight houses, 12 old people's dwellings and 146 garages at Lewsey estate, for B.C.: Drury and Co., Ltd., The Grange, Wigston Fields, Leicester, £284,949 (subject to Ministry approval) proval).

proval). ewbury, Berks. — Conversion of five cottages to form four dwellings with installation of bathroom, hot water and drainage at 27-35 Station Road, Thatcham, for R.D.C.: Brown and Cleverley. Flat Tops, Ashmore Green. Newbury, £2,734.

Norwich.—Twelve one-bedroom flats at Watling Road, Heartsease estate, for City Council: Ford and Carter, Ltd., Baltic House, Mountergate, Norwich, £17,415 (recommended).

riouse, Mountergate, Norwich, £17,419 (recommended).

Peterborough.—Sixteen flats and 18 houses at Gunthorpe East and four flats at Keeton Road site, for City Council: S. B. Fairchild and Sons. Ltd., 11 Welland Road, Peterborough, £36,574, and N. J. H. Overton. 13 Sheridan Road, Peterborough, £5,131, respectively (recommended, subject to Ministry approval).

Poplar.—Construction of foundations to block I at Arcadia Street site, for L.C.C. Wilson Lovatt and Sons, Ltd., 16 Grosvenor Crescent, London, S.W.I, £11,926.

Romford, Essex.—Twelve flats in two three-storey blocks at White Hart Lane, for B.C.: S. R. Bryett, Ltd., Gravs Farm, Church Elim Lane, Dagenham, £21,555 (recommended).

Elm Lane, Dagenham, £21,333 (condended).

Sunderland, Dur.—Fourteen old people's bungalows at The Oval, for B.C.: T. Srewart.
Peacock Street West, Sunderland, £27,800.

Welwyn Garden City, Herts.—Twenty-five bungalows. 179 houses, and 20 maisonnettes, for Development Corporation. James and Bywaters, architects, 5 Bloomsbury Street,

rt,

h

rk

ng

London, W.C.1; Rush and Tompkins, Ltd., 109 Station Road, Sidcup, Kent, £375,645.

West Bromwich, Staffs.—Sixty-four dwellings and 35 garages at Yew Tree estate, for B.C.: Nathan Hyde, 6 Claremont Road, Sedgley, £85,326 (recommended).

MATERIALS AND SUPPLIES

MATERIALS AND SUPPLIES

Halesowen, Wores.—Supply of 800 dustbins, specification B.S.S. 792/1947, for B.C.: T. Hill (Successors), Engine Lane, Lye, Stourbridge, 25s, (plus 3s. 74d. purchase (ax) each (recommended).

Luton, Beds.—Supply of 440 time switches, for B.C.: Venner, Ltd., Kingston By-pass, New Malden, Surrey, £1,701.

Stockport, Ches.—Supply of 310 faience fireplaces for Brinnington neighbourhood unit, contracts 46, 47, 48a and b, for B.C.: Shaw's Glazed Brick Co., Ltd., Whitebirk Works, Waterside, Darwen, Lancs., £7 15s. each (recommended).

MISCELLANEOUS

eds.—Supply of plastic press cloths for Knostrop sewage disposal works, for City Council: G. H. Heath and Son (1952), Ltd., Pickford Street Mills, Macclesfield, £4,654 ommended).

PLANT AND MECHANICAL TRANSPORT

Castlereagh, Down.—Supply and delivery of one 25 cu. yd. capacity dual tip refuse collector, fitted with a (a) suitable mechanical arrangement for handling bins of 1½ cu, yd. capacity; (b) ventilated double cab. providing accommodation for six loaders, for R.D.C.: A, S. Baird, Ltd., Ormeau Avenue, Belfast, £3,300 (accepted); Shelvoke and Drewery, Ltd., £3,480.

Shelvoke and Drewery, Ltd., £3,480.

Chippenham, Wilts.—Supply of portable air compressor and tools, for B.C.:Atlas Copco (G.B.), Ltd., 47a Zetland Road, Bristol, 6 (recommended). Estimated cost £1,291.

Salford, Lancs.—Supply of a B.M.C. 30cwt. lorry with diesel engine and tipping body, for City Council: Lookers, Ltd., Manchester, £894 (recommended).

Sheffield.—Supply of following for City

Council: One diesel engine G.A. type 11/2 tons roller with certain extra equipment—

Aveling-Barford, Ltd., Grantham, Lincs., £984; one Allen K.52 truck-mounted crane/excavator with certain extra equipment—John Allen and Sons (Oxford), Ltd., Cowley, Oxford, £6,446 (recommended).

Smethwick, Staffs,—Supply of a Morris J.2 15cwt, van, including painting and lettering, for B.C.: E. E. Brown and Co. (Smethwick), Ltd., Empire Garage, St. Pauls Road, Smethwick, £514 (recommended).

Stoke-on-Trent, Staffs.—Supply of four Dennis Tippax refuse collection vehicles, for City Council: Dennis Bros., Ltd., Guildford, £2,495 each (recommended).

Swindon, Wilts.—Supply of the following, for B.C.: One three cu. yd. dumper—E. Boydell and Co., Ltd., Elsinore Road, Old Trafford, Manchester, £1,395 (recommended).

One 4 cu. yd. dumper and one tractor loading shovel—Plant Repairs (Bristol), Ltd., Fox Road, Bristol, 2 (recommended).

Estimated cost £390 and £1,800, respectively.

Wolverhampton, Staffs.—Supply of a mechanical road sweeper and a Commer

Estimated cost £390 and £1,800, respectively. Wolverhampton, Staffs.—Supply of a mechanical road sweeper and a Commer 3-ton van, for B.C.: Lewin Road Sweepers, Ltd., Victoria Works, Hill Top, West Bromwich, £2,875, and Wolverhampton Motor Services, Ltd., Cleveland Road, Wolverhampton, £360, respectively (recommended)

PLAYING FIELDS, PARKS, ETC.

Accrington, Lancs.—Provision of three tennis courts at Peel Park, for B.C.: Clapham's Nurseries, Ltd., Bramhall, £2,452 (recommended).

arrow-in-Furness, Lancs,—Development of the Duke Street-Fisher Street site as a play-ground for the Alfred Barrow County Secondary Schools, for B.C.: Direct Labour (recommended). Estimated cost £3,983. Barrow-in-Furness.

(recommended). Estimated cost £3,983.

Bristol.—Grading and adaptation of land at the Malago Valley (second section) for use as football pitches and clearing and regrading of land at the Trym Valley, Southhead, between Trowbridge Road and Shetland Road, for City Council: Direct Labour (recommended). Estimated cost £750 and £1,400, respectively.

Lewisham.—Laying out of gardens to blocks 1-4 at Derby Hill estate, for L.C.C.:

Knowles and Weller, Ltd., Croydon, Surrey, £3,172.

E3,172.

Poplar.—Laying out of gardens to blocks 1-4, 6, 11, 13-14, 16 and 18-21 at Alton Street site, for L.C.C.: St. Mary's (Contractors), Ltd., 273 Sussex Way, London, N.19, £27,18.

Salford, Lancs.—Construction of a garden layout at corner of Whit Lane and Broughton Road, for City Council: W. Gornall and Sons, Ltd., Salford, £896 (recommended).

Woolwich.—Laying out of gardens to blocks 1-15 at Kingsdale estate, for L.C.C.: A. Stevens, Senr., Woodford Wells, Essex, £15,518.

RAILWAY ENGINEERING

British Railways.—Following contracts placed: Eastern Region:

ritish Railways.—Following contracts placed: lastern Region:

Supply and installation of one 33-kV ring main unit at Shadwell—South Wales Switchgear, Ltd., Blackwood, Mon. Erection of equipment for 25-kV feeder stations and track sectioning cabins for 50-cycle a.c. electrification and supply and installation of earthing equipment, low tension a.c. connections and other miscellaneous small wiring in buildings on the London, Tilbury and Southend Line—Fuller Electric, Ltd., Fulbourne Road London, E.17.

Construction of troughing, pits, etc., for cable/air main route to signalling at Ripple Lane, Barking—W. and C. French, Ltd., Buckhurst Hill, Essex.

Supply and installation of signalling equipment for remote control of Stepney East and Gas Factory Junction from Fenchurch Street, including automatic train control equipment between Fenchurch Street and Bow Junction—The Siemens and General Electric Railway Signal Co., Ltd., East Lane, Wembley.

Supply and erection of an electrical installation in 2 Carriage Body Shop, Stratford—George E. Taylor and Co. (London), Ltd., 34 Southwark Bridge Road, London S.E.1.

Supply of eight sets of diesel electric arcwelding equipment—Max-Arc and Electrics, Ltd., Terrace Road, Walton-on-Thames, Surrey.



ROADS, BRIDGES AND SITE WORKS

Barrow-in-Furness, Lanes.—Ground borings on site of the proposed Michaelson Road high level bridge, for B.C. Mott, Hay and Anderson, consulting engineers, 9 Iddles-leigh House, Caxton Street, Westminster, S.W.I: Cementation Co., Ltd., Bentley, Doncaster, £2,409 (recommended).

Beverley, Yorks.—Construction of an extension to Sigston Road and the requisite site works, for B.C.: Direct Labour, £2,900 (recommended, subject to Ministry ap-

(recommended, subject to Ministry approval).

Birmingham.—Following works, for City Council: Supply, laying and maintaining of asphalt in Boulton Road (part)—Constable, Hart and Co., Ltd., Peartree Lane, Dudley; construction of roads and sewers at Garretts Green estate industrial area—D. B. Evans (Bilston), Ltd., Oxford Street, Bilston; supply of prestressed precast concrete units for inner ring road scheme, section I (part II), Bull Ring—Hoveringham Concrete Co., Ltd., Hoveringham, Bleasby, Nottingham; reconstruction of Redditch Road and Icknield Port Road (part) and supply, laying and maintaining of asphalt in Farm Lane (part)—Road Surfacing Co., Ltd., 68 Hagley Road, Edgbaston, Birmingham, 16; structural works for pedestrian subway. Corporation Street-Bull Street junction—Taylor Woodrow Construction Co., Ltd., London, W.1; laying of thin carpet of asphalt in St. Vincent Street (part) and supply, laying and maintaining of asphalt in Sandon Road (part) and Redditch Road (part)—Limmer and Trinidad Lake Asphalt Co., Ltd., Trinidad House, Coventry Street, Birmingham, 5. Birmingham

Street, Birmingham, 5.

Bletchley, Bucks.—Laying of approx. 2,300 sq. yd. of 6in. reinforced concrete carriageway, together with kerbs and footways, and various ancillary works, at Station Approach Road, for U.D.C. J. F. Smithie engineer and surveyor: Daybrook Quarries, Ltd., Morris House, Jermyn Street, London, S.W.1, £9,000. Work commencing April 1.

Cheltenham, Glos.-Road and path formation works for extension of the Garden of Remembrance, for B.C.: Grimshaw Kinnear, Ltd., Tewkesbury Road, Cheltenham, £2,608 (recommended).

Downham Market, Norfolk.—Construction of road and sewer at Paradise Road (in connection with the erection of 28 houses), for U.D.C.: E. W. Bates, £3,062 (accepted, subject to Ministry approval); J. H. Cross and Son, £3,155; Warren Bros., £3,709; A. King, £3,727

East Retford, Notts.—Making-up of Newton Street and widening and reconstruction of Wellington Street, for B.C.: Herbert Ashley, Sheepbridge, Sheepbridge Lane, Mansfield. Esher, Surrey.—Private street works at Island Farm Avenue, Island Farm Road (part), and Pool Road (part), West Molesley, contract 292, for U.D.C.: W. and J. Glossop, Ltd.. 123 East Hill, Wandsworth, London, S.W.18, £12.146. 123 Eas £12,146.

Esher, Surrey.—Omnibus lay-bys, Portsmouth Road, A.3, Esher and Copsem Lane, A.244, Oxshott, contract 293, for U.D.C.: Ebenezer Mears (Contractors), Ltd., Cumberland Works, Chertsey Road, Byfleet, Surrey, £2,137.

Fermanagh.—Construction of a new carriage-way, approximately 1,620 lin. yd. long on route A.46 from Enniskillen to Belleek in the townlands of Silverhill and Maghera-dunbar, for C.C.: J. J. Scallon and Sons, Ltd., Irvinestown, £41,760.

Finchley, Middx.—Improvements of the junction of North Circular Road and Regents Park Road, for C.C.: Fitzpatrick and Son (Contractors), Ltd., 455 Old Ford Road. London, E.3, £73,895.

Friern

London, E.3, £73,895.

Friern Barnet, Middx.—Reconstruction and resurfacing of the Woodhouse Road/Summers Lane junction, for U.D.C. E. H. Start, engineer and surveyor: Fitzpatrick and Son (Contractors), Ltd., 455 Old Ford Road, E.3, £4,416.

Freenhithe, Kent. — Repairs to roadway in binding gravel and cold bitumen spraying and gritting running from entrance gate to new bungalows, for Thames Nautical Training College, H.M.S. Worcester: Hodsons, Ltd., 17 Wrotham Road, Gravesend.

Laslingden, Lancs. — Resurfacing on Black-

Haslingden, Lancs.—Resurfacing on Black-burn Road (Pilling Street to Acre garage), for B.C.: Trinidad Lake Asphalt Co. (North Western), Ltd., India Buildings, Water Street, Liverpool, 2 (recommended).

Hereford.—Construction of car park in St. Martins Avenue, for City Council: Taylor and Co., Barton Works, Barton Road, Here-ford, £2,678 (recommended).

ford, £2,678 (recommended).

Houghton-le-Spring, Dur. — Site preparation works for houses and bungalows on the Burnside estate, for U.D.C. A. Veitch, surveyor: Direct Labour, £26,952.

Leeds.—Following works, for City Council: Private street works — Lancastre Grove (part III) and Primley Park Crescent (part IV)—Thorp of Leeds, Ltd., 52 Gledhow Wood Grove, Leeds, 8, £477 and £797, respectively; Sandhill Grove, Sandhill Mount (part II) and Sandhill Ord (part III)—Hadsphaltic Construction Co., Ltd., Dean Avenue, Leeds, 8, £4,295.

Improvement works—Sunnyview Gardens (part)—Thorp of Leeds, Ltd., £1,955; York Road from Watson Road to Foundry Lane: Fallon (Civil Engineering and Plant Hire), Ltd., Suspension Bridge Works, South Accommodation Road, Leeds, 9, £41,283; Flax Place (excluding surfacing work)—Hadsphaltic Construction Co., Ltd., £7,724 (all secommonded) (all recommended).

Luton, Beds.—Construction of carriageways and foul and surface water sewers at Lewsey estate, for B.C.: Matthew James and Co., Ltd., £33,351 (subject to Ministry approval) proval).

Co., Ltd., £33,351 (subject to Ministry approval).

Maidstone, Kent.—Widening of Glebe Lane, for B.C.: P. A. Barden and Sons, Ltd., Weavering House, Ashford Road, Maidstone, £22,227 (recommended).

Manchester.—Following, for City Council: Second stage of the main runway extension to 7,000ft., including clearance and improvement work on the flight strip at the southwesterly end of the main runway and the provision of fencing and also of barrier gates and traffic signals for the control of traffic along a length of the Altrincham to Wilmslow Road: Richard Costain, Ltd. Westminster Bridge Road, London, S.E.I., extension of contract; construction of roads and sewers at Rose Hill, Marple, overspill site: North Western Contracting Co., Park Avenue, Manchester, 13.

Middlesex.—Duplication of the carriageway on the Barnet By-pass from Mill Hill Golf Course to The Fairway, Hendon, for C.C.: John Laing and Co., Ltd., Mill Hill, N.W.7 (recommended, extension of existing contract). Estimated cost £24,365.

Nelson, Lancs.—Tarspraying on various roads.

Nelson, Lancs.—Tarspraying on various roads, for B.C.: S. Sutcliffe and Son, Ltd., Crage Road Depot, Mytholmroyd (recommended).

Norwich.—Construction of roads and laying of sewers at the Hall Road (clearance area housing site, for City Council: Direct Labour (recommended, subject to Ministry

approval).

"lymouth.—Making-up of Powisland Drive for City Council: Direct Labour (recommended). Estimated cost £10,718.

streets in the Thatto Heath, Grange Park and Pocket Nook areas, for B.C.: John Finlan, Ltd., Hale Road, Halebank, Widnes.

Widnes.

Saltash, Corn.—Construction of approx. 107 lin. yd. of macadam carriageway, together with kerbing, channelling, drainage, water main and footpaths at Grenfell Avenue, fith extension, for B.C. A. De Barr, borough surveyor: W. and J. Glossop, Ltd., Exhibi-



experience of mechanical trenching, there is a growing conviction that Allen trenchers do the finest job, with the least maintenance.

There are three Allen models, the 16.60 for digging to a maximum

of 14ft., the 14-30, and the 12-21 for medium and smaller trenches.

This 14/30 at work on Salisbury Plain is cutting very cleanly through lumpy chalk. Whatever the conditions you will find an Allen makes the going easy.

JOHN ALLEN & SONS (Oxford) LTD . COWLEY . OXFORD . Tel: 77155/7

tion Way, Pinhoe Trading Estate, Exeter, £6,011 (in lieu of previous tender).

60.011 (in lieu of previous tender).

Sheffield.—Following works, for City Council:
Construction of four tennis courts at High
Hazels Park and resurfacing of three tennis
courts (10, 11 and 12) at Whiteley Woods—
En-Tout-Cas Co., Ltd., Syston, Leicester,
£2,539 and £1,739; construction of four
tennis courts at Meersbrook Park—
Maxwell M. Hart, 163 Buchanan Street,
Glasgow, £2,953; reconstruction of two
tennis courts (5 and 6) at Whiteley Woods—
Tarslag, Ltd., Bowesfield Lane, Stockton-onTees, £2,146 (all recommended).
Shinley. Yorks.—Construction of the follow-

Tees, £2,146 (all recommended).

Shipley, Yorks.—Construction of the following, for U.D.C.: Belmont Terrace, 112yd. in length; Belmont Crescent, 118yd. in length; Taunton Street, 150yd. in length; Back Thompson Street (East), 23yd. in length; Back Kirkgate (North), 71yd. in length; Airedale Paving Co., Ltd., Wharnclifte Road, Shipley.

Stockport, Ches.—Reconstruction of footpaths and carriageway at Gorton Road (part), for B.C.: G. Cox and Sons, Ltd., £10,677 (recommended).

mended).

B.C.: G. Cox and Sons, Ltd., £10,67/ (recommended).

Sunbury-on-Thames, Middx. — Construction of footways, crossings and verges at housing site 11, Roseacre, stage 1, for U.D.C.: A. A. Williams (Contractors), Ltd., 405 Nelson Road, Hounslow, £2,975.

Wales.—Construction of the first seven-mile section between Abergavenny and Brynmawr of the new Heads of the Valley trunk road, for M.T. Rendel, Palmer and Tritton, consulting engineers, 125 Victoria Street, London, S.W.I: John Morgan (Builders). Ltd., Northumberland Lodge, Cathedral Road, Cardiff, £1,333,912.

West Bromwich, Staffs.—Following works, for B.C.: Construction of roads and sewers and certain levelling works at Charlemont Farm estate—E. E. Jeavons and Co., Ltd., Lower Church Lane, Tipton, £92,177 (recommended).

recommended).
Construction of lay-by in Newton Road between Jayshaw Avenue and Waddington Avenue – Direct Labour (recommended).
Estimated cost £535.

Estimated cost £535.

West Riding. — Addition of second carriageway to the Great North Road between Redhouse and Wentbridge, for C.C.: George
Wimpey and Co., Ltd., £748,000.

Whitstable, Kent. — Making-up and surface
water sewering of Southwood Road (part),
for U.D.C. B. E. Hardy, engineer and surveyor: Bowzell, Ltd., Wellington House,
Walmer, Deal, £4,408 (accepted); Direct
Labour, £4,698; Wingham Engineering Co.,
Ltd., £4,908; Barton Construction Co., Ltd.,
£5,194; R. Costain, Ltd., £5,245; Ellingham,
Ltd., £5,366. Ltd., £4,908; Barton Construction Co., Ltd., £5,194; R. Costain, Ltd., £5,245; Ellingham, Ltd., £5,366.

Wincanton, Som. — Housing site works at Lower Balsam, for R.D.C., comprising approx. 3,850 super. yd. of tarmacadam

carriageway and footpath, together with approx. 800 lin. yd. of soil and surface water sewer, and other ancillary works. A. R. Hill, engineer:: W. and J. Glossop, Ltd., Exhibition Way, Pinhoe Trading State, Exeter, £12,840.

Volverhampton, Staffs.—Following works, for B.C.: Resurfacing Marston Road and reconstructing the footpath on the north side of the road — Tarslag, Ltd., Dunstall Road. Wolverhampton, £7,329; layout of paved playground at Underhill Infants' School—Constable, Hart and Co., Ltd., Derby, £818 (recommended).

Vorcester.—Following works, for City Council: Construction of access roads and concrete paved areas as a preliminary to stage II (pig section) of the redevelopment of the livestock market—Droitwich Construction Co., Ltd., Acre Lane, Droitwich, £3,949; paving of concrete slabs of an area around the centre course totaliser at Pitchcroft—N. W. Dunn and Co., Ltd., Bromsgrove, £536 (recommended).

SEWERAGE, SEWAGE, AND REFLISE

SEWERAGE, SEWAGE AND REFUSE DISPOSAL

DISPOSAL

Ashby-de-la-Zouch, Leics.— Construction of extensions to Measham and Oakthorpe sewage treatment works, for R.D.C., consisting of two detritus tanks two vertical flow settling tanks, two 65ft diameter percolating filters, three humus tanks, six sludge drying beds, sludge storage area, pumping station and control house, together with attendant pipework, drains, site works, and the reconstruction of existing units. Pick, Everard, Keay and Gimson, consulting engineers, 6 Millstone Lane, Leicester: A. A. Smart and Son (Glasgow), Ltd., Colwick estate, Colwick, Nottingham, £21,219 (accepted); Richardson and Cooney, Ltd., £23,217; Divis (Contractors), Ltd., £23,394: Atherton, Sheehan, Ltd., £23,447; Cecil Williamson and Co., Ltd., £25,002; Hadsphaltic Construction Co., Ltd., £26,190; William D. Randall (Hartshill), Ltd., £27,847; Holloway Bros. (London), Ltd., £28,438. Work commencing March 1.

£28,438. Work commencing March I.

Birmingham. — Following works, for City
Council: sewerage work in the Highgate
redevelopment area, unit 408, and reconstruction of section I of Sparkbrook Valley
sewer: Humphries and Page, 254 Vicarage
Road, Birmingham, 14; construction of
sewers in the Nechells Green redevelopment
area, units 4 (part 2) and 28—Martin Peyton
and Co., 9 Newborough Road, Shirley.
Birmingham.

Buxton, Derbys. — Civil engineering work
required in connection with the second and
third phases of the sewage works reconstruction scheme, for B.C.: Z. and W. Wade
(Whaley Bridge), Ltd., Buxton Road, Whaley
Bridge, Stockport, Ches., £120,919.

Chadderton, Lancs.—Laying of approximately 160 lin. yd, of 12in. diameter porous concrete pipe drain and the construction of manholes on the Melrose Mill site, for U.D.C. F. W. Pexton, engineer and surveyor: James A. Cuss, Rochdale. Work commencing February.

veyor: James A. Cuss, Rochdale. Work commencing February.

Dursley, Glos.—Contract 1—construction of approximately 5,500 lin. yd. of 12in. diameter to 6in. diameter concrete, glazed ware and cast-iron sewers and manholes, cast-iron rising mains and the construction of sewage disposal works, comprising balancing tanks sedimentation tanks, filters, humus tanks sludge drying beds, and lagoons, two pumping stations, and other work incidental thereto at Kingswood and Wotton-under-Edge, for R.D.C. A. P. I. Cotterell and Son, consulting engineers 54 Victoria Street, Westminster, S.W.I: H. W. Tily and Son, Well House, Wotton-under-Edge, £104,252 (accepted); Ware Construction Co. Ltd., £106,917; W. Kendrick and Sons, Ltd., £109,250; Gavaghan and McAlpine Co. Ltd., £112,573; Concrete Piling, Ltd., £121,994; Harrow and Heales, Ltd., £122,947; Stone and Co. Bristol), Ltd., £129,612; T.H. Contractors, Ltd., £140,530. Work commencing April.

some and Co. (Bristol), Ltd., £129,612; T.H.
Contractors, Ltd., £140,530. Work commencing April.

Esher, Surrey.—Improvements and extensions to the Esher and Molesey sewage disposal works, contract 4, for U.D.C., comprising the construction of two sedimentation tanks, five biological filters, two humus tanks, sludge drying beds, pipelines and various miscellaneous works. J. D. and D. M. Watson, consulting engineers, 67 Tufton Street, Westminster, S.W.1: Concrete Piling, Ltd., 10 Westminster Palace Gardens, London, S.W.1, £170,562.

Guildford, Surrey.—Ash Vale main drainage—phase IVa, for R.D.C.: J. W. Snape, engineer and surveyor: T.H. Contractors, Ltd., 300 Chiswick High Road, London, W.4. [442,991.

phase IVa, for R.D.C.: J. W. Snape, engineer and surveyor: T.H. Contractors, Ltd., 300 Chiswick High Road, London, W.4. £42,991.

Hertford.—Laying of a sewer in Hagsdell Road and Church Path, for B.C.: George Mott and Son, Watton-at-Stone, Herts., £1,160 (recommended).

Hitchin, Herts.—Execution of sewage disposal works, comprising the construction of grit channels, comminutor chambers, pumping station, sedimentation tanks, flow dividing and dosing chambers, percolating filters, humus tanks, sludge drying beds, feed, effluent, sludge and top water pipes, and other appurtenant works, contract 4, for U.D.C.: D. Balfour and Sons, Consulting engineers, 131 Victoria Street, Westminster, London, S.W.I. H. Osman and Co., Ltd., Winchester Road Southampton, £404,294. Work to commence mid-April.

Huntingdon.—Laying of approximately 600yd.

Huntingdon.—Laying of approximately 600yd. of 6in. diameter stoneware sewer, 2,000yd.

FOR ASPHALTE · TARMACADAM · FELT ROOFING

LONDON · BARROW · BIRMINGHAM · CANTERBURY · EXETER · GLASGOW · LINCOLN · LIVERPOOL · MANCHESTER · NEWCASTLE



of asbestos-cement rising main and the construction of a sewage pumping station at Conington, for R.D.C. Pick, Everard, Keay and Gimson, consulting engineers, 6 Millstone Lane, Leicester: Crawshaw Robbins and Co., Ltd., Northampton, £6,665 (accepted); D. and H. Contractors (Cambridge), Ltd., £7,893; J. J. Curran, Ltd., £9,088; Joseph Webster, Ltd., £7,625; Kell Harris (Contractors), Ltd., £8,103; Stamford Construction, Ltd., £7,598.

Leeds.—Supply of screens and raking equipment for storm water overflow, for City Council: Longwood Engineering Co., Ltd. (recommended). Estimated cost £1,000.

Lisburn, Antrim.—Laying of an extension sewer in Duncan's Road, for U.D.C., comprising approximately 200 lin, yd. of 9in. glazed stoneware pipe sewer with four manholes: Henry Young, Alexander Yard, Limestone Road, Belfast, £1,070 (accepted); E. Thompson and Co., £1,143; J. McQuillan, Ltd., £1,198; F. and R. Catney, £1,685; P. J. Walls, £1,775.

Liverpool.—Supply and erection of eight circular filter distributors for the South Liverpool sewage disposal works, for City Council: Adams Hydraulics, Ltd., York, £3,198 (recommended).

Newcastle upon Tyne.—Sewer works at Church Street, Walker, for City Council: Direct Labour, £3,800 (recommended).

Penrith, Cumb.—Sewerage scheme at Skelton, for R.D.C. Waterhouse and Rounthwaite, consulting engineers, 165 Westmorland Road, Newcastle upon Tyne: J. Watson, Newbiggin, Stainton, £18,054.

Rowley Regis, Staffs.—Construction of foul sewer from Dudley Road East to Johns Lane, for B.C.: Hagarty Kerrigan and McTigue, 4 Seven Acres, Aldridge, £5,151 (recommended).

St. Austell, Corn.—Provision, erection and maintenance of three vertical spindle, unchokeable centrifugal pumps of 1,000 g.p.m. of asbestos-cement rising main and the

Lane, 101 Both McTigue, 4 Seven Acres, Aldridge, £5,151 (recommended).

St. Austell, Corn.—Provision, erection and maintenance of three vertical spindle, unchokeable centrifugal pumps of 1,000 g.p.m. capacity, complete with electric motors, starters, wiring, and ancillary equipment at Mevagissey, for U.D.C. H. G. King, engineer and surveyor: Sigmund Pumps, Ltd., 106 Terminal House, 52 Grosvenor Gardens, S.W.I. £3,780 (subject to Ministry approval).

Salisbury and Wilton, Wilts.—Laying of approximately 7½ miles of 6in., 9in. and 12in. diameter sewer in concrete and spun-iron pipes, together with precast concrete manholes, laterals, pumping station, and other incidental works at Downton, stage II, contract 2, for R.D.C. Lemon and Blizard, consulting engineers, Telford House, Hulse Road, Southampton: Henry Osman and Co., Ltd., Winchester Road, Southampton. £124,604.

Ltd., Winchester Road, Southampton. £124,604.
Sheffield. — Construction of sewers at the Worrall day premises, near Sheffield, for Regional Hospital Boards J. Childs, Sheffield,

Sheffield.—Reconstruction of certain bio-aeration units at Blackburn Meadow sew-age disposal works, for City Council: Direct Labour (recommended), Estimated cost

Sowerby Bridge, Yorks.—Sowerby New Road relief sewer, for U.D.C. Work provides for approximately 11yd, of 30in, diameter concrete sewer; 88yd, of 27in, diameter concrete sewer; 42yd, of 21in, diameter concrete sewer; 40yd, of 18in, diameter sewer; 32yd, of 15in, diameter concrete sewer; 32yd, of 15in, diameter concrete sewer; 32yd, of 6in, diameter spunsewer; 52yd, of 6in, diameter spun-iron

sewer; 10 manholes; one storm overflow and appurtenant works. Keith Robson, engineer and surveyor: K.J. Construction, Ltd., 47 Butternab Road, Beaumont Park, Huddersfield, £7,925.

Welton, Lincs.—Laying of about 1,480yd. of 9in, diameter pipe sewers, etc., at Saxilby, for R.D.C. Elliott and Brown, consulting engineers, Stanley House, Pelham Road, Nottingham: Frank A. Eccleshare, Ltd., Dixon Street, Lincoln, £11,999.

Wolverhampton, Staffs.—Construction of a sewage disposal system at Pendeford Hall caravan site, for B.C.: Direct Labour, £2,822 (recommended, in lieu of previous tender).

tender).

Worcester. — Construction of manholes at St. George's Lane North, Barbourne Road, Hylton Road and Henry Street, for City Council: Flanagans Constructors, Ltd., £838 (recommended).

STREET LIGHTING

Cwmbran, Mon.—Erection of 42 group A steel street lighting columns, for the De-velopment Corporation: Abacus Engineering, Ltd., Russell Chambers, King Street, Not-

steel street lighting columns, for the Development Corporation: Abacus Engineering, Ltd., Russell Chambers, King Street, Nottingham.

Doncaster, Yorks. — Road lighting at Western Hospital, for Sheffield Regional Hospital Board: Stewart Maggs, Ltd., 41 Victoria Street, Doncaster, £1,750 (recommended).

Faversham, Kent. — Supply and erection of 11 lanterns and fittings for 140-W sodium discharge lamps, together with prestressed concrete columns, brackets and other equipment, at Stone Street, for B.C. A. C. E. Richardson, borough engineer and surveyor: Atlas Lighting, Ltd., Thorn House, Upper St. Martin's Lane, W.C.2, £710 (accepted); General Electric Co., Ltd., £769; Erecon, Ltd., £727; A.E.I. Lamp and Lighting Co., Ltd., £741.

Hartlepool, Dur. — Street lighting in the King Oswy Drive extension, for B.C.: Engineering and Lighting Equipment Co., Ltd., Sphere Works, St. Albans, £1.044.

Hereford. — Installation of street lighting on section III of Green Lane estate, for City Council: A.E.I. Lamp and Lighting Co., Ltd., 132 Long Acre, London, W.C.2, £580 (recommended).

Huntingdon. — Provision of improved lighting on various roads within the borough, for B.C.: A.E.I. Lamp and Lighting Co., Ltd., London, W.C.2, £4730 (recommended).

Huntingdon. — Provision of improved lighting in the Lighting Co., Ed., £5,454; Engineering and Lighting Equipment, Ltd., £5,253; Atlas Lighting, Ltd., £5,454; Engineering and Lighting Equipment, Ltd., £5,089; Abacus Engineering, Ltd., £5,713; General Electric Co., Ltd., 5,102.

Luton, Beds.—Provision of night lighting for the concrete runway at Luton Airport, for B.C.: C. Maurice Contractors, Ltd., Bishop's Stortford, £33,222 (subject to Ministry approval).

proval).

Maidstone, Kent.—Erection of 30 group B
lanterns in the Park Wood estate area, for
B.C.: Siemans Edison Swan, Ltd., 33
Grosvenor Place, London, S.W.l, £1.361
(recommended, subject to Ministry approval).

proval).

Weymouth, Dorset. — Provision of group A street lighting in Westwey Road, North Quay, Boot Hill (part), Rodwell Road, Buxton Road and Portland Road, for B.C.: A.E.I. Lamp and Lighting Co., Ltd., 132 Long Acre, London, W.C.2, £10,417 (recommended).

OPENCAST MINING

N.C.B.—Contracts let in connection with opencast coal production during January:

Seymour Disposal Point: canteen improvements and new latrine—Ernest Fletcher.
Cheadle: care and maintenance of diposal point—Robert M. Douglas (Contractors),

GOVERNMENT CONTRACTS

Admiralty.—Particulars of contracts over £1,000 in value placed by Civil Engineer-in Chief's Department:

Hampshire: construction of store—John Hunt, Ltd., Gosport; conversion of hutted camps—John Hunt, Ltd., Gosport. Kent: roofing — Neuchatel Asphalte (Contracting), Ltd., Maidstone

Air Ministry.—Contracts to the value of £500 or over for the week ended Jan. 29:

Air Ministry.—Contracts to the value of £500 or over for the week ended Jan. 29:

Building and maintenance: Waddington, Lancs.—J. W. Stamp and Co., Ltd., Nuthall Road, Bobbers Mill, Nottingham; Leconfield, Yorks.—F. Shepherd and Son, Ltd., Blue Bridge Lane, York; Ely, Cambs.—Coulson and Son, Ltd., 37 St. Andrews Street, Cambridge; Honington, Suifolk—William Sindall, Ltd., 347 Cherryhinton Road, Cambridge; Old Sarum, Wilts.—A. J. Dunning and Sons (Weyhill), Ltd., Weyhill, Andover, Hants; North Luffenham, Oakham, Rutland—J. W. Stamp and Co., Ltd., Nuthall Road, Bobbers Mill, Nottingham; Hendon, London, N.W.9—George W.mpey and Co., Ltd., Hammersmith Grove, London, W.6: Honington, Suifolk—Walter Lawrence and Son, Ltd., Ventnor House, London Street, Swaffham, Norfolk; Wyton, Hunts.—F. R. Hipperson and Son, Ltd., Invicta House, Wantz Road, Dagenham, Essex, A. J. G. Potter and Sons, Ltd., Stanwick, Wellingborough, Northants; Scampton, Lincs.—A. Monk and Co., Ltd., P.O. Box 4, Stamford, Lancs.

Runway works: Martlesham Heath, Suffolk —Road Works (1952), Ltd., 57-61 Commercial Road, Ipswich, Suffolk; London Airport—John Cochrane and Sons, Ltd., Poyle Road, Colnbrook, Bucks.

Artificers' work: Marham, Norfolk—Walter Lawrence and Son, Ltd., Ventnor House, London Street, Swaffham, Norfolk—Preparation of land for sports field: Harrogate, Yorks.—Maxwell M. Hart (Glasgow), Ltd., Chronicle Buildings, Corporation Street, Manchester, 4.

Metropolitan Police.-Recent contracts placed

Alterations to canteen, Kingston Police ation—Ransoms (Hook), Ltd., £748. Internal redecorations, Leyton Police ation—W. T. Ricketts and Sons, Ltd.,

£1,665.

Internal redecorations, The Grove, Ealing
—The Middlesex Paint Craftsmen, £1,298.
Additional prisoners' accommodation,
Bow Street Magistrates' Court — John
Hoare and Son, £1,987.
Internal redecorations, Mansfield Heights
and Aylmer Road, N.2—J. H. and W. Heal,
Ltd., £2,772.



and good appearance. This fire-proof and rot-proof sparage is available in four types—high front, high back, back-to-back and stepped with Marley up-and-over or traditional timber doors. Low initial cost. Virtually maintenance free, Marley will supply and deliver only or supply and erect. Installed for hundreds of Local Authorities. Site work can also be undertaken, if required. We shall be pleased to submit quotations on request. Marley make the best garages.

MARLEY CONCRETE LIMITED, Dept. 1491, Peasmarsh, Guildford, Surrey (Head Office). Guildford 62986. Shurdington, Nr. Cheltenham, Glos. Shurdington 334/5. Hatchpond Road, Waterloo, Poole, Dorset. Broadstone 626. London Showrooms: 251 Tottenham Court Road, W.1.

Ministry of Finance, Northern Ireland.—Contracts exceeding £250 in value placed during the period Jan. 18 to Jan. 29, inclusive:
Construction and completion: New Office Building, Omagh—J. A. Gamble, Dock Street, Strabane, Co. Tyrone.
Erection and completion of one forester's red one woodman's cottage: Pomeroy House

and one woodman's cottage: Pomeroy House Forestry Centre, County Tyrone — Benson Bros., Ltd., Killymoon, Cookstown, County

Forestry Centre, County Tyrone—Benson fros., Ltd., Killymoon, Cookstown, County Tyrone.

Sinking and lining of a well, etc.: Cattle and Sheep Pens, Killeen—K. and H. O'Hare, The Crescent, Jerretts Pass, Newry. Internal cleaning and part painting: Commonwealth House, Castle Street, Belfast, 1—G. F. Johnston, Ltd., 70 Clifton Street, Belfast, 13. Internal and external painting: Chichester House, Chichester Street, Belfast, 14. Internal painting and cleaning, etc.: Head Post Office, Royal Avenue, Belfast, 13. Internal painting and cleaning, etc.: Head Post Office, Royal Avenue, Belfast, 13. Internal cleaning and painting: R.U.C. Station and Married Quarters, Ballymena—Plenum heating and ventilating installations: New Petty Sessions Courts. Chichester Street, Belfast, 1—Andrew Air Conditioning Ltd., Mill Street West, Belfast, 13. Construction of A.T.E. and M.T. Workshop; Telephone Exchange, Ballymena—J. and H. E. Doherty, Ltd., Bushmills Road, Coleraine.

Coleraine.

J. and H. E. Donerty, Ltd., Bushmills Road, Coleraine.

Ministry of Works.—Contracts placed for week ended Jan. 22.:

Aberdeenshire: Constitution Street, Peterhead—alterations—James Scott and Son, Ltd., 483-5 Union Street, Aberdeen.

Hertfordshire: Telephone Exchange, Bishop's Stortford—erection—Thomas Bates and Son, Ltd., The Old Brickworks, Harold Wood, Romford, Essex.

Lanarkshire: 13, 14, 15 Crown Terrace, Dowanhill—installation—Underhill Heating Engineers, Ltd., 1324 Dumbarton Road, Glasgow, W.4; State Mental Hospital and State Institution, Carstairs—erection—J. Wight and Co. (Edinburgh), Earls Gate Works, Grangemouth.

Lancashire: Post Office Central Repair Workshops, Collins Road, Bamber Bridge-internal and external painting—Arthur Pugh and Co., 236 Bolton Road, Salford, 6; Wayfarers Hostel (National Assistance Board), Walkden: alterations and adaptations—James Cocker (Contractors), Ltd., Station

Southampton

Sawmills, Walkden; Ministry of Pensions and National Insurance, Scalefield Mill, Nelson—renewal of roof—Furnest and Co., Queen's Mill Road, Little Royd, Huddersfield, Yorks.

Queen's Mill Road, Little Royd, Huddersfield, Yorks.
London: General Post Office, King Edward Building, E.C.1—renewal of lift 8—Sykes and Son, Ltd., 8 Essex Street, Strand, W.C.2; Custom House, E.C.3—change over from d.c. to a.c.—L. J. Palmer of London, Ltd., Baring Works, S.E.12; H.M. Land Registry, Lincolns Inn Fields, W.C.2—reinstatement of war-damaged forecourt paving, etc.—Richard Maddern, Ltd., 15 The Viaduct, Sherwood Road, South Harrow, Middx.
Warwickshire: Post Office Supplies Depot, Fordrough Lane, Birmingham—renewal—Phillip Cecconi and Son, Ltd., 81-82 Ryland Road, Edgbaston, Birmingham.
Yorkshire: National Milk Testing Service, New Market Street, Skipton—new laboratories—Harry Turner and Son (Gargrave), Ltd., Belmont Bridge, Skipton.

Post Office. — Contracts for duct laying, etc., works to the value of £500 and over placed during the week ended Jan. 30.

works to the value of £500 and over placed during the week ended Jan. 30.

The Baillie Contracting Co., Ltd., 2061 Coventry Road, Sheldon, Birmingham, 26; A. H. Ball and Co., Ltd., Tilford Road, Farnham, Surrey; J. E. Billings and Co., Ltd., 54 Beddington Lane, Croydon, Surrey; Hugh Brown (Engineers), Ltd., Chart Road, Ashford, Kent; C.D.L. Construction Co., Ltd., Church Road, Egham, Surrey; James Cooper (Construction), Ltd., 28 Kensington Church Street, London, W.8; J. A. Crawford, 3 Belle View Park, Sunderland, Co. Durham; P. Cusack and Co., 52 Parkside Way, North Harrow, Middx.; The Edge Construction Co., Ltd., English Damside, Carlisle, Cumberland; W. and C. French, Ltd., 50 Epping New Road, Buekhurst Hill. Essex; A. F. Hastings and Co. (N.1), Ltd., 7 Ballyregan Road, Dundonald, Belfast. Northern Ireland; Henry Hemmings, Ltd., 129 Brigstock Road, Thornton Heath. Surrey; P. Lowery and Sons, Ltd., Sussex Road, Southall, Middx.; J. Murphy and Sons, Ltd., 43 Charteris Road, Finsbury Park, London, N.4; The North Midland Construction Co., Ltd., Portland Works, Daybrook Nottingham; Robert Paterson and Sons, Ltd., Milton Street, Airdrie Lanarks.; John T. Pickard (Harrogate), Ltd., 168 Skipton Road, Harrogate, Yorks.; Stanley Raymond and Co., Ltd., Sussex Road, Southall, Middx.; Regan and Almond, Ltd., 30 Sutton Road, Heaton-Norris, Stockport,

Alexander Thomson and Ltd. 45a Kensington and (London), Ltd., 49 Street, London, W.8.

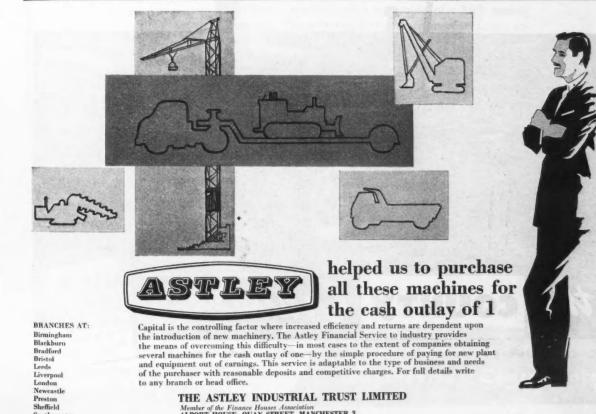
C. (London), Ltd., 45a Kensington High Street, London, W.8.

War Department.—Contracts placed for the week ended Jan. 22:
Brecknockshire (Sennybridge): roadwork—W. and J. Glossop, Ltd., Bridgend.
Cumberland (Carlisle): building—James Millar and Sons, Carlisle.
Derbyshire (Foston): re-sheeting—Maurice Hill, Ltd., Horndean,
Essex (Colchester): painting and decorating—Decorative Painting Contractors, Ltd., Hounslow; building—Joseph Moss and Sons, Ltd., Colchester; (Shoeburyness): building—J. C. Flaxman and Sons, Ltd., Southend-on-Sea.
Flintshire (Kinmel Park): painting and decorating—T. H. Kenyon and Sons, Ltd., London, W.9.
Hampshire (Aldershot): painting—Decorative Painting Contractors, Ltd., Hounslow, Kent (Gravesend): roadwork—W. H. Bensted Contractors, Ltd., Maidstone.
Lanarkshire (Glasgow): heating—C. F. Howden, Ltd., Glasgow): heating—C. F. Howden, Ltd., Glasgow): heating—C. F. Shropshire (Shrewsbury): building—M. A. Boswell (Contractors), Ltd., Wolverhampton; (Donnington): electric—Frances Electric, Ltd., Wednesbury.
Surrey (Bisley): building—E. J. Logan (Putney), Ltd., Putney.
Contracts placed for the week ended Jan. 29:
Berkshire (Windsor): building—Buirt and Vick, Ltd., Poole.
C. Down (Lisburn): building—Baird Bros., Belfast.
Essex (Colchester): painting and decorating—Donald Humberstone and Co., Ltd., Louth.
Kent (Shorncliffe): building—J. J. Clayson and Son, Ltd., Folkestone (Chatham): building—

Louth.

Kent (Shorncliffe): building—J. J. Clayson and Son, Ltd., Folkestone (Chatham): building—J. H. Durrant and Son, Ltd., Rochester.

Rochester.
Pembrokeshire (Castlemartin): painting and decorating—J. H. Woodward (Contractors), Ltd., Leamington Spa.
Shropshire (Donnington): water supply—D. B. Evans (Bilston), Ltd., Bilston.
Warwickshire (Long Marston): roadwork—Norman W. Dunn and Co., Ltd., Bromsgrove; (Nuneaton): decoration—F. Harris and Co., Ltd., Leicester.
Worcestershire (Droitwich): roadwork—W. and J. Glossop, Ltd., Birmingham.



THE ASTLEY INDUSTRIAL TRUST LIMITED Member of the Finance Houses Association ALPORT HOUSE, QUAY STREET, MANCHESTER 3 Telephone: DEAnsgate 6831 (10 lines) "Telex No. 66117

"Must have power for this job ..."

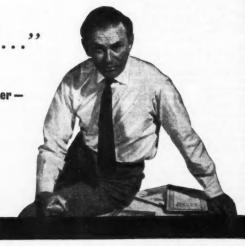
And, by George, he's got it! It's the

County Mark IV with Bray Hydraulic Angledozer —

NOW POWERED WITH THE 51.8 B.H.P.

FORDSON POWER MAJOR DIESEL ENGINE!

THE CRAWLER WITH THE LOW PRICE AND HIGH PERFORMANCE



- ★ Fordson Power Major Diesel Engine, giving 51.8 b.h.p. at 1,600 r.p.m., provides more-thanample power for every job.
- * Five forward gears . . . two reverse.
- * High traction . . . low ground pressure . . . less churning in wet weather.
- ★ Blade length 7' 4". Angle of tilt from straight — 26 either way. Blade tilt between ends 8". Blade dig below ground 9". Blade lift above ground 2' 4".
- ★ Every County Dealer is fully equipped to give fastest service and on-the-site-repairs, with lowest charges for replacement parts and reconditioning.



BULK EXCAVATION problems solved!



Our MODERN FLEET OF EXCAVATION PLANT

Including 7½ cubic yard shovels, 22 ton Euclids and Rubber Tyred Scrapers is capable of a high weekly output. We welcome enquiries from contractors engaged on Major Road Contracts and other work offering

BULK EXCAVATION



MARTIN COWLEY LTD

CLAY CROSS . DERBYSHIRE

London Office:

112 JERMYN ST. LONDON, S.W.I.

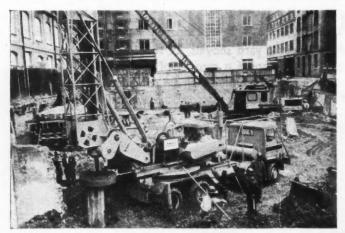
Telephone: WHITEHALL 3282 (3 Lines)

Building and Civil Engineering Contractors

something new!



leads again with specialized equipment

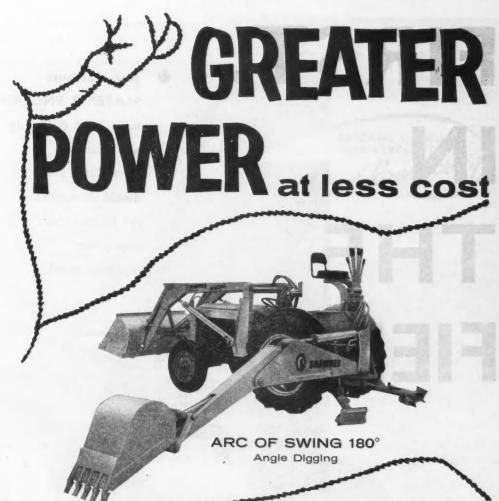


On the road or on the site, this specially adapted Foden chassis is more than equal to the heavy demands made on it during the erection by John Laing and Son, Ltd. of a £4 million 16 storey office block for the St. Martin's-le-Grand Property Co. Ltd. A joint Anglo-American enterprise (the drilling rig comes from Texas and the power unit and vehicle chassis are Foden) this massive 24 ton foundation boring unit is capable of drilling shafts up to 8 ft. in diameter and 65 ft. in depth. The Foden chassis is fitted with hydraulic jacks. The McKinney drilling rig incorporates a 65 ft. retractable jib. Larger rigs are available to drill up to 110 ft. in depth and 8 ft. diameter.

London Sales Office: 139 Park Lane, W.1.

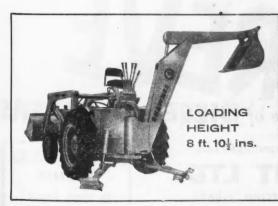
Telephone: Grosvenor 5932





With the Shawnee "Warrior" Digger you get powerful digging action to a depth of 11 ft. 3 ins... 180° angle digging... high loading to 8 ft. $10\frac{1}{2}$ ins... and a long 17 ft. reach. All working parts are bushed to reduce wear. It is a versatile, speedy, easy-to-operate and a more economical machine—it is a machine with the highest power-to-weight ratio built today and Contractors will be well advised to write for fuller details. Illustrated literature is available on request... and don't forget, greater power means a faster job.

Shawnee 'WARRIOR' DIGGER





STEEL FABRICATORS (CARDIFF) LTD., ROATH, CARDIFF. Telephone: 44436
Export enquiries to: STEEL FABRICATORS (OVERSEAS) LTD., I BAKER ST., LONDON W.I
Telephone: WELbeck 0751/2
Telegrams: Steeloader, Wesdo, London

FIRST.

IN

THE

first - because

SLATER & ENGLAND LTD.

have been designing and making One Cubic-yard

diesel dumpers

for longer than any other

manufacturer!





THE MODEL SHOWN IS THE MARK 8

The CONGREVE range of DIESEL DUMPERS

Please Write or Phone the Distributors for Free Demonstration Loan

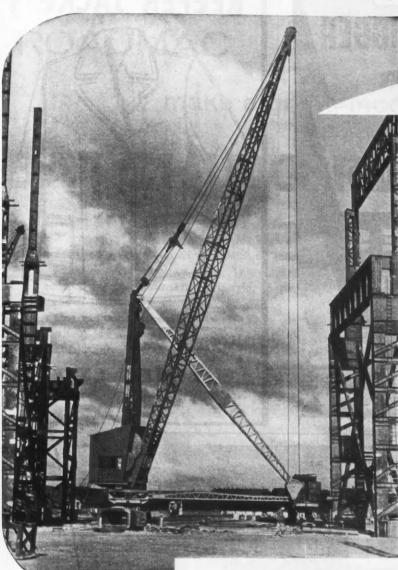
DISTRIBUTORS: KEBRIC PLANT

2 to 6 THE MEAD, CARPENDERS PARK, WATFORD, HERTS.

Phone: HATch End 6221/3

SALES & SERVICE AGENTS

in most areas!



erecting colville's NEW STEEL WORKS

at Ravenscraig

BUTTERS Portable DERRICKS

The crane shown is one of two Butters 30 ton Derricks of the two motor type. Each has a jib 130ft. long and is mounted on three bogies. They can be traversed along rails but are not power driven. The job in hand here is the erection of Messrs. Colville's new steel works at Ravenscraig.

Photo. by
courtesy of
COLVILLE'S CONSTRUCTION CO. LTD.

BUTTERS BROS. & CO. LTD.,
MACLELLAN STREET GLASGOW, S.I.

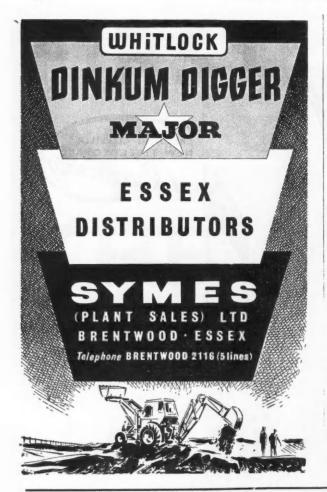
Telephone : IBROX 1141 (6 lines)

Telegrams: "BUTTERS, GLASGOW"

LONDON: CRANE WORKS, LONG LANE, HILLINGDON, MIDDLESEX.

BIRMINGHAM: PRINCES HOUSE, 71 TEMPLE ROW.

NEWCASTLE : 65 QUAYSIDE



REEFER JACKETS



Made of very heavy melton, or pure kersey wool, shower-proof, wool lining throughout, ex Naval reconditioned, **EXCELLENT VALUE** each

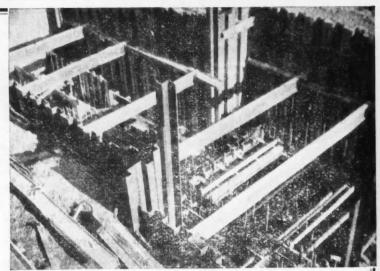
33/-

TIMEG LTD.

Dept. PC/7, 102 WARDOUR STREET, LONDON, W.1 Telephone: GERrard 1191-2

SUBLET YOUR
STEEL
SHEET
PILING

TO



W. A. DAWSON LTD.

SPECIALIST EQUIPMENT FOR ALL SIZES ON CONTRACT

SUNDON PARK, LUTON

LUTON 52203

ROADMAC

make a great, modern range of

BATCHING PLANTS

Roadmac have a greater range plus speed, efficiency and economy. They are designed for smooth, streamlined operation on all weighbatching jobs.

Either *mobile*, *portable* or *static*. This range is built on the *unit construction* principle; to give speed of erection.

One operator can deliver from 30 to 180 cu. yds. per hour automatically, semi-automatically or by manual control.

The illustration shows a Readmac fully mobile plant.

- # 4 compartment 48 cu. yd. hopper.
- * Aggregate weighbatcher giving batch capacity for a 4 cu. yd. truck mixer.
- # Mobile cement silo of 30 tons capacity.
- * Truck mixer station integral with conveyor and silo.



"Mooile Ready-mixed Concrete plant" (reproduced by permission of F. A. Hunnable & Son Ltd.)



Member of the Muir Robb

there's a ROADMAC Batcher for every weighbatching job



West Drayton, Middlesex. Tel: West Drayton 3721

BABI



BY CONTRACT

YARDAGE BASIS. PLANT HIRE WITH OPERATORS

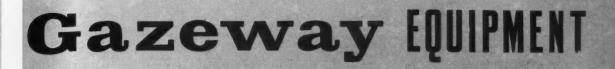
SUB-CONTRACT

LIMAS 1201 DRAGLINE WITH FACE SHOVEL EQUIPMENT TD24, 20 & 18 BULLDOZERS

D TYPE TOURNAPULLS-54, 22 & 19RB EXCAVATORS WITH FACE SHOVEL EQUIPMENT

D8 TRACTORS & SCRAPERS & SUITABLE BULLDOZER EQUIPMENT

W. J. SIMMS, SONS & COOKE LTD., EXCAVATION DEPT., HAYDN ROAD, NOTTINGHAM CABLES CONTRACTS. NOTTINGHAM 66264 (Ten Lines)



is there when you want it



goes one better

At Gazeway we are available 24 hours a day to meet your requirements, so remember — whatever plant or equipment you need to buy or hire, contact Gazeway

GAZEWAY PLANT HIRE LTD.

One of the GAZE Group of Companies

PORTSMOUTH ROAD, THAMES DITTON, SURREY.

Telephone: EMBerbrook 551! C CICT (Night 6147)

THESE



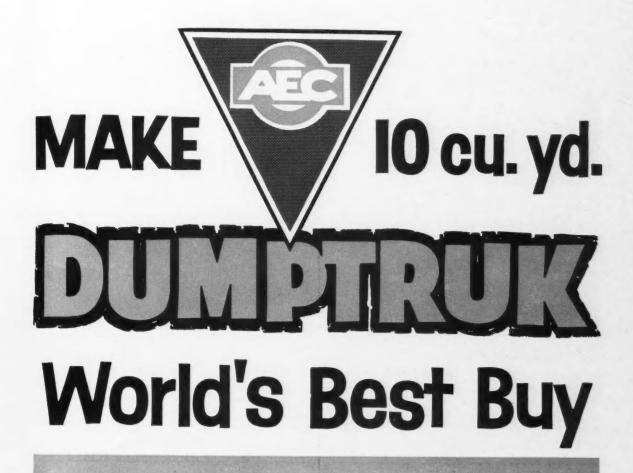
POINTS

The A.E.C. Dumptruk gives an unrivalled combination of capacity, economy, power and output. With a payload of up to 30,000 lbs, extra-quick turn-round, and outstanding economy of operation, the A.E.C. Dumptruk gives the cheapest cost per yard moved.



Designed, powered and built by

A.E.C. LIMITED SOUTHALL · MIDDLESEX



- FULLY ARTICULATED BOGIE Exclusive A.E.C. fully-articulated rear bogic gives unrivalled traction on rough uneven ground.
- Fully constant-mesh 5-speed Developed for continuous low gear running, ease of operation and high speeds when required.
- unfailing power 150 b.h.p. A.E.C. Diesel with the unique torque output to match worst conditions.

- RAPID TURN-ROUND
 - 70° tip with clean discharge and return in under 30 seconds provided by 3-stage twin hydraulic rams with power return.
- Pressed channel section Frame Robust present channel frame
- OPERATOR COMFORT Power-assisted steering, cab comfort with g visibility, heater and demister, reduce opera



Sole Distributors in U.K.

SCOTTISH LAND DEVELOPMENT CORPORATION 65 BATH STREET, GLASGOW AND 32 ST. JAMES'S STREET, LONDON, S.W.I.

SERVICE DEPOTS: GLASGOW, NEWCASTLE-UPON-TYNE, NOTTINGHAM.

RICHARDS - NEWPORT

PLANT HIRE - PLANT SALES

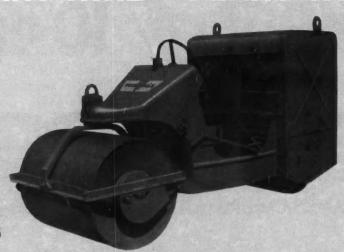
DROTT SKID SHOVELS

BULLDOZERS

PUMPS

EXCAVATORS

ROAD ROLLERS



VIBRATING ROLLERS

COMPRESSORS

DUMPERS

CONCRETE MIXERS

H. RICHARDS & CO. LIMITED
RODNEY ROAD, NEWPORT, MON. Phone: NEWPORT 59732

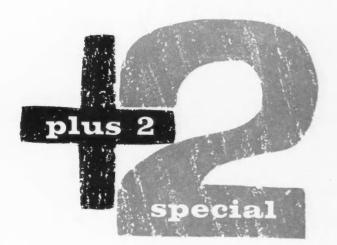


MADE IN ENGLAND RAYBESTOS-BELACO LIMITED

EVERITE HOUSE . SOUTHWARK STREET . LONDON S.E.I.

Telephones: WATerloo 7031-4, 3842-7

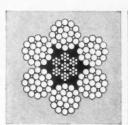
XCLUSIVE DISTRIBUTORS OF RAYBESTOS PRODUCTS IN THE EASTERN HEMISPHERE



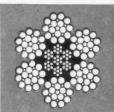
A GLOVER WIRE ROPE-

specially produced for earthmoving machinery

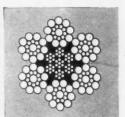
Plus 2 Special, with independent wire rope core, is literally 'a rope within a rope' – combining great toughness with the utmost flexibility—for all types of earthmoving machinery working under every variation of operating conditions.



SURE-LAY SPECIAL



PLUS 2 SPECIAL combines toughness and flexibility for



DOUBLE NINE SPECIAL for really difficult duties

Write for further details to

GLOVER BROTHERS (MOSSLEY) LTD

Mossley, Near Manchester.Tel. Mossley 444/445/446.Grams."Ropes, Mossley"

Glovers know



MEMBERS OF THE GLOVER GROUP British Ropeway Engineering Co. Ltd., Drag Scraper & Conveyor Co. Ltd., Glover Brothers (Mossley) Ltd., Wm. Jas. Glover & Co. Ltd., Ropeways Ltd.

A855

RICHARDS - NEWPORT

PLANT HIRE — PLANT SALES

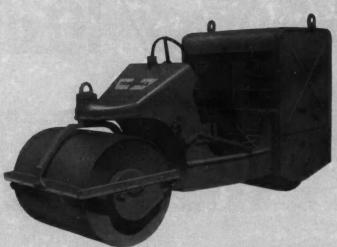
DROTT SKID SHOVELS

BULLDOZERS

PUMPS

EXCAVATORS

ROAD ROLLERS



VIBRATING ROLLERS

COMPRESSORS

DUMPERS

CONCRETE

H. RICHARDS & CO. LIMITED
RODNEY ROAD, NEWPORT, MON. Phone: NEWPORT 59732



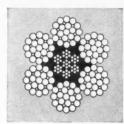
XCLUSIVE DISTRIBUTORS OF RAYBESTOS PRODUCTS IN THE EASTERN HEMISPHERE



A GLOVER WIRE ROPE-

specially produced for earthmoving machinery

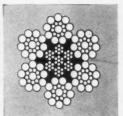
Plus 2 Special, with independent wire rope core, is literally 'a rope within a rope' – combining great toughness with the utmost flexibility—for all types of earthmoving machinery working under every variation of operating conditions.



SURE-LAY SPECIAL



PLUS 2 SPECIAL combines toughness and fiexibility for



DOUBLE NINE SPECIAL

Write for further details to

GLOVER BROTHERS (MOSSLEY) LTD

Mossley, Near Manchester.Tel. Mossley 444/445/446.Grams."Ropes, Mossley"

Glovers know



the ropes

MEMBERS OF THE GLOVER GROUP British Ropeway Engineering Co. Ltd., Drag Scraper & Conveyor Co. Ltd., Glover Brothers (Mossley) Ltd., Wm. Jas. Glover & Co. Ltd., Ropeways Ltd.

A855



PUMPS DERRICKS BULLDOZERS **SCAFFOLDING** TRENCH DIGGERS LOADING SHOVELS LOCOMOTIVES ROAD BREAKERS **EXCAVATORS DUMPERS** MOBILE CRANES CONCRETE MIXERS **ROLLERS • HOISTS** COMPRESSORS ETC.

LONDON

Wood Lane, London, W.12. Tel: Shepherds Bush 2070

STANNINGLEY

Nr. Leeds. Tel: Pudsey 2241

KINGSBURY

Nr. Tamworth. Tel: Hurley 281

MANCHESTER

Cobden St., Pendleton, Salford 6. Tel: Pendleton 4411

NEW/CASTLE

Trafalgar House, Collingwood St., Newcastle-on-Tyne l Tel: Newcastle 23313

SHEFFIELD

Coborn Works, Tinsley, Sheffield 9. Tel: Sheffield 42033 **GLASGOW**

Cogan St., Pollokshaws, Glasgow S3. Tel: Langside 6131

SWANSEA

Beaufort Works, Morriston, Swansea. Tel: Swansea 71741

SOUTHAMPTON

Princes Street, Southampton. Tel: Southampton 26116

BELFAST

Station Street, Belfast 3. Tel: Belfast 58211

BATH

24 High Street, Bath. Tel: Bath 5353

SONS COMPANY AND

WOOD LANE, LONDON, W.12

Tel: SHEpherds Bush 2070. Grams: Omniplant, Telex, London





(Continued from page 677)

NOBLE PLANT AND ENGINEERING CO., 75 Terrace Road, Walton-on-Thames, Surrey. Telephone PLANT FOR SALE. 2593-4-5.

Loral MCS Mobile Diesel CRANE, good order, £2,950.

1988 EXCAVATOR, 3VQBN, year 1947, fitted Dragile, £1,250.

1088 EXCAVATOR, 8514, 3VRON, electric start, reconditioned, £95ted Caterpillar D3400 Diesel EXCAVATOR, 8514, 3VRON, electric start, reconditioned, £95ted Caterpillar D3400 Diesel EXCAVATOR, 8514, 3VRON, electric start, reconditioned, £95ted Caterpillar D3400 Diesel Excavation, any equipment, £1,150.

108E EXCAVATOR, 8514, 3VRON, electric start, recondition, £100, A3030, Perkins Pall 5375.

112 MOBILE CRANE, Ruston Diesel, Lattice Jib, year 1948, £650 DUMPERS (three), year 1948, £650 DUMPERS (three), year 1950, £115, 131, Milliars CONCRETE MIXER, running order, £35, 1017 Rex MIXER, Ruston Diesel, year 1950, £115, 107, Stothert and Pitt MIXER, Petter Diesel, year 1950, 1953, overhauled, £175.

107 Batom Knox MIXER, Ruston Diesel, year 1950, 1953, 5200.

Mulir-Hill 3 cu, yd, DUMPER, P6 Diesel Engine, year 1951, 250, 100 each, year 1941, £200.

109-51, £200.

Mulir-Hill 3 cu, yd, DUMPER, P6 Diesel Engine, year 1951, 1951, 200d order, £175.

213-ton Greens Model DRX ROLLER, Lister Diesel, year 1941, £200.

109-51, £200.

Mulir-Hill 3 cu, yd, DUMPER, ex Ministry of Supply, as year 1941, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200.

109-51, £200

2in. 3in.

INSERTS for N.C.K. 19RB and 22RB, new, £45 each, and 3in. Ransomes-Rapier Centrifugal PUMPS, Petter AVA1, £30 each.
Auto Diesel Centrifugal PUMPS, Petter AVA1, £30 each.
PUMP, with 40ft. Hose, £12S. Syless Centrifugal PUMP, with 40ft. Hose, £50. Syless Centrifugal PUMP, First Control Pump, £50. Syless Centrifugal PUMPS, £45. Syless Centrif

FOR SALE, Chaseside 700 LOADMASTER, new May, 1959, owner retired. — B.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon, Watlington 44.

AVAILABLE for SALE, lying in London, several Evans Duplex GROUT PUMPS, 8in. x 3in. x 8in., air driven.
Write Box P.1177, "The Contract Journal."

> KINGSTON PLANT HANWORTH . MIDDX.

FOR CONCRETE MIXERS AND ALL PLANT HIRE FELTHAM 4084



trnest AND SONS LTD

for secondhand

DINKUM DIGGERS

Cheapest prices in the trade for reliable machines

Always in stock Also spares ULTING MALDON ESSEX

Telephone: Hattield Peverel 311 (night 319)

FOR S A L E.

oillar D4 and Birtley Dozer, reconditioned,

Caterpillar D4 and Birtley Dozer, reconditioned, 51,500. Caterpillar D2, fitted L.P.C. Dozer, £650. Allis-Chalmers HD7w, fitted Baker Hydraulic Angle-dozer and Double Drum Winch, reconditioned, £950.

dozer and Double Drum Winch, reconditioned, £950.
International TD18, fitted Dozer and Winch, £650.
International TD9, fitted Dozer, £450.
International TD9, fitted Carco Winch, £350.
International TD9, fitted Carco Winch, £165.
Johnson COMPRESSOR, £-00.
Johnson COMPRESSOR

Tel.: Stoke Saint Milbro 237. Nr. Ludlow, Shropshire.

FOR S A L B.
Four Carco E TIMBER WINCHES.
Three TOURNACRANES. AD3, 20,000lb.
One Caterpillar 8H GRADER.
Two HD14 ROOT GRUBBER EQUIPMENT.
One HD14 ROOT GRUBBER EQUIPMENT.
30 HD10 Baker CORNER SHOES and Four CUTTING
EDGES and FRONT IDLERS.
30 Buckeye G.L.T. Double-drum SCRAPER WINCHES.
Two Gair Wood CUZ WINCHES.
20 Pairs Wood CUZ WINCHES.
Fagss Road, Feltham, Middlesex. Tel.: Feltham 3045.

Faggs road, retinally, middlesext. 1817. Tetinally 349-3.

FOR HIRE / SALE: 1,500 yd. JUBILEE
TRACK: 20 TURNOUTS: 200 FLAT BOGIES
(nine lith brakes); 40 SIDE-TIP WAGONS: 20 DOUBLE
BOGIES (ALL)
RAMS SIMPLY AND SIMPLY AND

F OR SALE.

100 Larssen No. 3 PILES, 45ft.

120 Frodingham 18 PILES, 14/15ft.
300 Larssen 1U PILES, 16/1.

Buckingham Place, 16/1.

Buckingham Place, London, S.W.1. VICtoria 0252.

FOR HIRE, Lorry-mounted MOBILE
CRANES—3-ton, 5-ton and 10-ton Coles, 2-ton
Hydracranes and Jones. Jib lengths up to 60ft.
COVENTRY MOTOR SPARES,
Gulson Road, Coventry. Telephone 63431.

WANTED, in lots, Muir-Hill 2yd, and 3yd, DUMPERS, Petrol Engines, with good tyres. HOLLINGS & ANDREWS (WELDING ENGINEERS), LTD.. East Bush Lane Works, Otley (2940), Yorks. WANTED, D8, 13, 14 or 15A Series.—Write

GAZEWAY OFFER

PLANT FOR SALE

TRACTOR ROLLER OIL in 4½-galion Jerricans, HD30, 15/- per can. 2 cu. yd. DRAGLINE BUCKETS, unused, fully dressed, £135,

\$135, \$5, \$c.u. yd. DRAGLINE BUCKETS, £140.
10RB DIGGER ARM and BUCKET, unused, £85.
10RB FAIRLEADS, £30.
33RB FAIRLEADS, £50.
33RB FAIRLEADS, £50.
10RB SKIMMER/BACKACTER EQUIP., complete, £145.
54.

Experiment Wolf, Cub BACKACTER, SKIMMER |

Jones Super 20 CRANE, Diesel driven Ruston, on solids, £450. £450. 10RB EXCAVATOR, Skimmer/Backacter Equipment, 19000 Series, £1,650. Priestman Wolf 3A 5097, overhauled, fitted Backacter,

3in Ransomes CENTRIFUGAL PUMPS, Diesel, £45 each. 12-ton LOW-LOADER JACKS, with steel lands, £17 10s.

31n Ransomes CENTRIFUGAL PUMPS, Diesel, £45 each.
12-ton LOW-LOADER JACKS, with steel lands, £17 10s.
per pair.
One Pair HD5 reconditioned TRACK CHAINS and One
FRONT IDLER. £100.
PG CALEPHINE TRACTOR. Angledocer. £2,500.
6yd. Rostics SCRAPER. in first-class order, £500.
Several D7 4T MACHINES. reconditioned, ex U.S.
Government, fitted Cable Dozer and D/D Winch.
Choice of 10 machines, from £2,150.
1yd. Westwood GRAB, self-dumping, overhauled. Firstclass order, £175.
150-Amp Petrol driven Welding PLANT, £50.
High Tensile BOLITS of every description and size from
1812. Else Knox MIXER, Hydraulic Weighgear and
Mould Scraper, Diesel, £500.
19RB BACK BALANCE WEIGHTS, £70.
International 15 to 20 to LOW-LOADER, 12K, 6in. well,
K.O. rears, £400.
1-kVA GENERATOR, 230-Volt A.C., powered by
Cardinet Diesel Engine, &kid-mounted, £275.
1-kVA GENERATOR, 230-Volt A.C., powered by
Cardinet Diesel Engine, &kid-mounted, £275.
1-kVA GENERATOR, 230-Volt A.C., powered by
Cardinet Diesel Engine, &kid-mounted, £275.
1-kVA GENERATOR, 230-Volt A.C., powered by
Cardinet Diesel Engine, &kid-mounted, £275.
1-kVA GENERATOR, 200-Volt A.C., powered by
Cardinet Diesel Engine, &kid-mounted, £275.
1-kVA GENERATOR, Diesel driven, 1956 Prur of manu-

powered by Perkins P6 Diesel Engine, Band-taosana, powered by Perkins P6 Diesel Engine, Band-taosana, 229.

22RB EXCAVATOR, Diesel driven, 1956 PFBF of manufacture, fitted as Dragline, 25,300.

International TDIS TRACTOR, fitted Hydraulic Bulldozer and Ruston D/D Winch, £1,450.

Jones Super 481 4-ton Diesel driven CRANE, £850.

Several ELECTRIC MOTORS, 400-Volt, from 5-h.p. to 100-h.p. t

GAZEWAY PLANT HIRE LTD.

The Gazeway, Portsmouth Road, Thames Ditton, Surrey. Telephone: EMBerbrook 5511 and 6147 (night 6147).

FOR SALE.

Slade Filliar De. 2U17176, 25 C.C.U. and 85 slade £2,750.

Gater Blade, £2,750.

Caterolliar De. 2U15769, 25 C.C.U. and 8A Hydraulic Blade, £2,750.

Caterolliar De. 2U15769, 25 C.C.U. and 8A Hydraulic Blade, £3,000.

Caterolliar De. 2U16852, 25 C.C.U. and 8A Hydraulic Blade, £3,000.

Caterolliar De. 2U16852, 25 C.C.U. and 8A Hydraulic Blade, £3,000.

Caterolliar De. 71 Series, L.P.C. Hydraulic Blade, £750.

CATEROLOGIC DE. 2U16852, 25 C.C.U. and 8A Hydraulic Blade, £3,000.

Caterolliar De. 2U16852, 25 C.C.U. and 8A Hydraulic Blade, £750.

CATEROLOGIC DE. 2U16852, 25 C.C.U. and 8A Hydraulic Blade, £750.

Choice of two Allis-Chalmers HD19s, R.R. Engines, £750 each.

La Plant. Choate SCRAPER, £75.

Calion GRADER, Model 118, Leyland Engine, £650.

HD5 Allis-Chalmers SHOVEL, excellent condition, £2,000.

BTD Drott, 13 months old, reconditioned, £2,000.

Levertons for Common-sense Prices Again.

H. LEVERT on Common-sense Prices Again.

Telephone: Spalding 3221.

FOR SALE,
ROAD ROLLERS, Aveling-Barford GC6, November, 1947, one owner, reconditioned Diesel Engine Just Atted, Price Scarlier, Canopy Sprayers.
Ditto, GB1, September, 1948, ax County Council, has Ruston 2VTHR Diesel Engine, Canopy, Sprayers.
Ditto, GA 30/35cwt. 1948, with Ford B Petrol Engine.
All in stock my works.
A. M. COLE, Eastgate, Sleaford, Lincs. Tel. 463.

IF your business is "dated" and you seek new outlets, you cannot do better than contact us for full details of READY MIXED CONCRETE. We can supply all the plant required, give you facts and figures of running costs, capital outlay, etc. Many people outside the trade have entered this new industry—why not you? — WILLIAM 6. SEARCH, LTD., whitchall Road, Leeds, T2. Tel. 639081 (10 lines)—siter hours: Pudsey 348.

SMITH Super 10 EXCAVATOR, Serial No. 21608, 1952 manufacture, well maintained and in first-class order, inspection reports by manufacturers available, machine equipped with Skimmer, Backacter, Dragline and Crane Equipment, or would sell separately.—Offers as and where lying to HIRE-PLANT, LTD., North Circular Road, Stonebridge Park, N.W.10.

WANTED, ‡ or ‡ Light-type Dragline BUCKET, suitable for loading loose coal.—S. T. PICKARD, LTD., Chapel Street, Pelsall, near Walsall, Staffs. Tel.: Pelsall 35.

FOR HIRE, Barber-Greene Junior, new 1957, and Barber-Greene Major, new 1959. — FRED. WATKINS (ENGINEERING), LTD., Coleford, Glos.

WANTED, Buckeye TRENCHER for land drainage. Machine suitable for snares would suit.—Write Box P.9576, "The Contract Journal."

TOKEN FOR PLANT HIRE YOUR

Excavators, Dozers and Scrapers, Dinkum Major Diggers and Drott Shovels, Trenchers, Dumpers, Rollers, Concrete Mixers, Pumps, Compressors, Rammers, Vibrators, Hoists, Generators, etc.

TOKEN CONSTRUCTION COMPANY, LIMITED

PLANT DEPOTS: STATION ROAD, VALMAR ROAD, THATCHAM, BERKS, CAMBERWELL, S.E.S. Tel: Thatcham 3343/3378. Tel: Brixton 5193.

TOWER CRANE FOR HIRE

BUILDMASTER MODEL 42 TRAVELLING TOWER CRANE

having the following duties:-

31 tons @ 31 ft. radius 178 ft. high 2 tons @ 65 ft. 6 in. radius 155 ft. high 11 tons @ 88 ft. 6 in. radius 117 ft. high

ABELSON & CO. (Engineers) LTD.

Coventry Road, Sheldon, Birmingham Telephone: SHELDON 2424

and at LONDON and MANCHESTER

Ace Comet mobile and Midget scaffold

TOTtenham 0401 (10 lines)

NORMAN WALKER (MACHINERY), LTD.

Pryme Street, Anlaby, East Yorkshire.

Pryme Street, Anlaby, East Yorkshire.

Phones: Kirkella S7967 and S7968.

OFFERS THE FOLLOWING FIRST-CLASS

OFFERS THE FOLLOWING FIRST-CLASS.

Two Neals Type NM 2-ton Diesel CRANES, can present the property of the p

FOR SAIE, a rather fine 24RR FORWARI SHOVEL, with complete thoroughly overhauled and in available in about two weeks of the complete that the complete of the

FOR SALE, International TD18 CRAWLER TRACTOR, Serial No. 5725, with Ruston-Bucyrus P24 P.C.U. and with Le Tourneau Model LS 9 cu. vd. Scraper. In good working order, £1,150.—WESTERN CONTRACTORS SERVICES, LTD., Severn Road, Hallen, Bristol.

Hailen, Bristol.

FOR SALE or HIRE: 20-ton Supersilo
CEMENT SILO: also Blaw Knox Rex Cleanline
14/10 CONCRETE MIXER with Hydraulic Welgher and
Dragshovel.—JOSEPH PUGSLEY AND SONS, LTD.,
Bristol, S. Tel.: Bristol 56037.

FOR R I M M E D I A T E H I R E. terpillar D4, D6, D7 and D8 TRACTORS, with pages and Scrapers.

19RB and 22RB EXCAVATORS, with usual ulpments.

FOR SALE, One Second-hand Marsden 20-ton per hour SAND AND GRAYEL PLANT. Now surplus to our requirements and available immediately, subject to being unsold. Offers.—Tel: Southport 77560.

MITCHELL'S PLANT SERVICES, LTD. MITCHELLS FLANT SERVICES, LID.,
can always offer an excellent range of used
Weatherill Hydraulic or Chaseside MECHANICAL
SHOVELS. Price to suit all users.—Write or 'phone:
Palmers Lane, Enfield, Middlesex. HOWard 3493.

STEEL SHEET PILES urgently WANTED.
All sections bought: large and small quantities.
DUDLEY VALE LTD...
Buckingham Place, London, S.W.1. VICtoria 0252. FOR SALE, International TD18 TRACTOR, with Ruston-Bucyrus Hydraulic Angledozer and P.C.U. 24.—P. BATES, Sunniside Farm, Iveston. Leadgate, Co. Durham. Tel.: Consett 359.

CATERPILLAR D4, fitted with Angledozer, as new.—BEN BURGESS TRACTORS, LTD., 43 King Street, Norwich, NOR. 048, Tel. 28251/2. WANTED, 19RB, with Face Shovel, for quarry. Must be in first-class order.—Write Box P.1124, "The Contract Journal."

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:
MINGELLANEOUS:
BLAW KNOX BATCHMASTER, 1955, overhauled, on
pneumatics, \$625.
WINGET 14/10 10NT MIXER, new 1955, Liste
Diesel, Dragshovel. Very good condition, \$275.
LOW-LOADING TRAILERS, 3, 5/5 and 8/10 ton,
ex Ministry. ALSO TRAILER-MOUNTED TANKS,
AIR PUMPS 2/3-Tool COMPRESSORS, Lister Diesel
Englines, om 2- or 4-wheel trailers or forry
chassis. Ex Ministry. Unused, from \$440/\$485.
each.

FOR SALE, 1957 4HTW Weatherill Hydraulic
Two-way OVEROADER, fitted with heavy-duty
water ballast 1400 x 24 rear wheel and tyre equipment. First-class order. £1,350,
Mitcham Road, Croydon. Tel.: Thornton Heath 8252.

BIG CRANE EXCAVATORS

A.R.C. MOTOR Co. Ltd. REDHILL WORKS, ARNOLD, NOTTINGHAM Telephone: 26-3331/5

FOR SALE or HIRE

Compressors 2 to 12 Tools. Vibrating Rollers, Crane Skips. Platform Hoists, Scaffold lib Cranes, Concrete Mixers, 4/3 to 14/10 cu. ft. Diesel Driven Pumps. Diesel Welding Plants.

JOSEPH THOMPSON & Co. (Liverpool) Ltd.

Dutton Street, Liverpool, 3. Central 0820 & 3023

andridge's grant

Telephone GREENWICH 3188-9 DANDRIDGE'S PLANT DEPOT 129-143 WOOLWICH ROAD, S.E.10

DUMPERS FOR SALE

THWAITES (official) STOCKISTS

FOR HIRE OF MODERN DIESEL "41"

COMPRESSORS

IN THE HIDLANDS

J. W. COX PLANT HIRE LTD. QUARRY BANK, BRIERLEY HILL, STAFFS. Phone: CRADLEY 66695

EQUIPMENT SALES & HIRE CO. LTD.

FOR HIRE

TRAXCAVATORS 955 CAT. D.7.'s Dozer or Scraper 19 R.B.'s - Any Equipment

HOUNSLOW 8831



* CRANE HIRE &TRANSPORT DIVISION. I . MARYBONE . LIVERPOOL

FOR SALE.

EX M.O.S. SNOW PLOUGHS, with all fittings, as new. 8.85. Reduction for quantity.

Four-wheel-drive Morris QUADS, with Winches, £75. Johnson Super RAMMER, as new. £22 10s. HYPRAULIC JACKS, Ift. to 5ft. long, from £4 each 3,000lb. per gr. in. British Oxygen COMPRESSORS, from Province Standers DIESEL ENGINE and Gearbox, £55. CAISTOR CONSTRUCTION.

CAISTOR CONSTRUCTION CO., Caistor, Lincs. Tel.: Caistor 314.

FOR SALE.

Unused 500-ton Three-station Hydraulic CONCRETE SLAB PRESS, with self-contained oil

CRETE SLAB PRESS, WITH SET-CONSTITUTE OF SUMMING UNITS OF STREET O

Radlett, Herts. Telephone: RADlet 5681 (6 lines).

WANTED, WANTED, WANTED, Heavy EARTHMOVING MACHINES and EQUIPMENT of all types. Modern machines preferred, others considered. Immediate inspection: spot cash settlement. Write, giving full details and location, to A.R.C. MOTOR CO. LTD. Redhill Works, Arnold, Nottingham, Telephone: Nottingham 263331/5.

F you want to PURCHASE or HIRE any CONTRACTORS' PLANT, please get in touch with METAL UNION (PLANT), LTD., 75 Victoria Street, London, S.W.1. Telephone: VICtoria 4868/9, 7425, 2177/8.

SEARCH 3in. Lift and Force "Mud Marvel"

BUMP, handles mud. sludge, sewerage, tannery
and other industrial waste. Lister Petrol or Diesel
drives withheall Road, Leeds, 12. Tel.: Leeds
639881 (10 lines).

WANTED, MOTOR ROLLER, second-hand, approx. 36cwt., for use on sportsfield.—Details to Headmaster, DE LA SALLE COLLEGE, Scott Road, shefield, 4.

BENFORD 18/12 DIESEL MIXER

For SALE, with built-in weighbatcher and Dragline Feeder. Excellent condition.

G. R. YEOMANS. LTD., Oxford Road, Ryton, Coventry. Telephone: Tollbar 2376.



SKIPS FOR SALE OR HIRE

Ring Battersea 9213/4/5 PLANT & BUILDING **EQUIPMENT LIMITED**

Chatfield Works, I Chatfield Rd., Battersea, London, S.W.II.

FLYST PUMPS FOR HIRE

All sizes of Flygt Electric Pumps available for hire (ex-stock)

Range includes 14in., 3in., 6in., and 8in. deliveries

INDUSTRIAL PUMPS LTD.

20 BENTINCK ROAD, HYSON GREEN, NOTTINGHAM Telephone 75182-3

S A L E. ee 1201 LIMAS, Cummins Engine, base

machines. 201 to Dragline Equipme One NCK304, F/S and two Dragline Equipme One NCK304, F/S Equipment, Gardner Eng Two Smith 2/10s, Fowler-Sanders Engine.

Two Smith 2/10, formand the first state of the firs

D UMPERS FOR SALE.
Two Thwaites 15cwt., 1955/56, Diesel, Gverhauled.
Two Benford 15cwt., 1955, Diesel, overhauled, £165
each.

each.

1. UREN,
10 Mortimer Road, Ealing, W.13. PERlyale 3255.

FOR SALE, Priestman Wolf Mark IIIB
EXCAVATORS, year of manufacture 1953, fitted
with any equipments, choice of three. Also one 1943
Priestman Wolf, Mark II. All with Diesel Engines.
FRANK EDMUNDS, LTD.. Watting Street Works
FROWNHISS, near Walsali. Phone: Erownhills 2305/6.

BULLDOZERS, MECHANICAL LOADING SHOVELS and TRAXCAVATORS, etc., TIPPING LORRIES, 57-ton, for HIRE—HERRY FROUD, LTD., Primrose Wharf, Tunnel Avenue, Greenwich, S.E.10. Telephone: GREenwich 0072-3.

STEEL SHEET PILES URGENTLY WANTED. All sections bought, large and small quantities.

Buckingham Place, London, S.W.1. VICtoria 0252.

WANTED, all types of CLETRAC TRACTORS, any condition.—State Serial No. and price required.—C. J. THORNE AND CO., LTD., Uckfield, Sussex. Telephone 178 (3 lines).

MOBILE CRANES for SALE, HIRE and SPARES—Coles, Ransomes, Morris, etc. ROBERT DIXON, LTD., Hunsdon Aerodrome, Ware, Herts. Tel.: Stanstead Abbots 301/3.

SLOGGETTS (ENGINEERING) CO., LTD. Fleet of DIGGER-LOADERS for immediate HIRE. 2 Burtons Road, Hampton Hill, Middx. Tel.: Tedding-ton Lock 1138/9.

19 & 33 R.B.s. T.D. & H.D.14s

FOR HIRE

SAND & SHINGLE LTD. FAGGS RD., FELTHAM, MIDDX. FELTHAM 3045



DIESEL PETROL AND STEAM ROLLERS

BOMFORD & EVERSHED LTD.

Telephone : BIDFORD-ON-AVON 3202

IGHT RAILWAY MATERIAL for SALE. GOODY 25th. 8.5. TRACK. 24in. gauge.

6,000 yd. 25th. 8.5. TRACK. 24in. gauge.

5,00 yd. of hew 30th. 8.5. TRACK.

1,000 yd. of 20th. 8.5. TRACK.

New Lister Diesel LOCOS. From £434.

20 '2yd. to 1yd. TIPPING WAGONS.

5implex and Planet Diesel LOCOMOTIVES, 24in. gauge.

Maco Pressed Steel Lavon TURNTABLES.

WHEELS and AXLES—31 gauges.

Maco AXLEBOXES.

Maco AXL

FOR HIRE.
Vickers Vigor ANGLEDOZERS and 13yd. Scrapers.
Flat 60 ANGLEDOZERS and 5/7yd. Open-bowl

Flat 60 ANGLEDOZERS and 5/7yd. Open-bowi Scrapers. Drott BTD6 SHOVELS. Vickers VR180 "C" Model TRACTOR, with Dozer and Winch. Good condition. Flat 55LI (1956) TRACTOR, with Dozer and Winch. Good condition.

RAPID LOADERS, LTD., 152 Oxford Street, Bliston, near Wolverhampton. ('Phone: Bilston 41751/5.)

FOR SALE, Neals NM MOBILE CRANE, 2-ton capacity, 35ft. Jib, pneumatic tyres, ready for work, excellent condition.—Write Box P.9923, "The Contract Journal"

FOR SALE or HIRE, New Greens 8cwt.
VIBRATORY ROLLERS, ex stock delivery.
WILLIAM R. SELWOOD, LTD., Chandler's Ford 2275
and Exeter 72375.

FOR SALE, a good modern Lima 2400. with both equipments, and in very good order. PLANT SALES, LTD. 25 Castleredgh Street, London, W.1. Telephone: Paddington 2663/5.

WILL PURCHASE Good Second-hand PLANT and ENGINEERING EQUIPMENT, Including Cranes, Forklifts, etc. — Write Box P.1142, "The Contract Journal."

FOR SALE, Model I Benford MIXER, very good condition.—'Phone: North 7074.

FOR HIRE

Jules Weitz G26 TOWER CRANE. Available and of February, 1960. Horizontal Saddle IIb 85ft. 4ln. Variable helpht to 96ft. 3 tons at 27ft. 10ln. to 1 ton at 35ft. 4ln. Ralis to 90ft. First-class machine and operator. May be seen working in Enfield, Middx. Reduced hire rates for extended hire.

Apply Plant Manager,
ALLEN FAIRHEAD AND SONS, LTD.,
Sydney Road, Enfield. Telephone 8232.

FOR HIRE

All Contractors' Plant

SLOGGETTS (ENGINEERING)

TON HILL, MIDDX. Teddington Lock 1138/9

ELDERS

300 amp. LINCOLN PORTABLE DIESEL SETS

HIRE FOR

Very Keen Bates - For Long Term Hires

MOORE'S PLANT LIMITED 105-129 MARKFIELD ROAD, N.IS

Phone: TOTtenham 0401/8



CAMBRIDGE OFFICE: Phone WATERBEACH 57

ROYSTON OFFICE: Phone: ROYSTON 3067

POR IMMEDIATE HIRE.

20-ton PORTASILO.

Delmag Diesel PILE HAMMERS. DS, D12 and D22.

McKlernan-Terry PILNG HAMMERS. 5, 6, 7 and 983.

SCL446 MOBILE. GRANE, preumatics, libs up to 50ft.

312-ton Vibro-Verken Trailer Type VIBRATING ROLLER.

Zenith PILE EXTRACTORS, Nos. 20 and 80.

Larssen Nos. 2 and 3 Sections STEEL SHEET PILES.

34yd. Weatherill LOADING SHOVEL.

Johnson 1 cu. yd. and 112 cu. yd. Diesel DUMPERS.

DUDLEY VALE. LTD.

3 Buckingham Place, London, S.W.1. VICtoria 0252.

SOUTHERN BUILDERS & CONTRACTORS

(LONDON), LTD.

HIRE:
All Contractors' Plant at very competitive rates.

FOR SALE:
Very reasonable price for good machines; would

Very reasonable price for good manufactures separate.

3-ton Diesel MOBILE CRANE, on Rubbers.
Write or 'phone:
"Cranleigh." The Drive, Rickmansworth 2878 or 5235.

FOR SALE or HIRE, Six 14B Muir-Hill
412yd. DUMPERS, rock bodies with Perkins P6
Engles. Well red. dieden and good — PLANT
SALES.

Well red. stieden and good — PLANT
SALES. Street, London, W.1.

'Phone: PADdington 2663/5.

WANTED to PURCHASE or HIRE for road contract, three CATERPILLAR DW21s.
Essex area. — Write Box P.1150, "The Contract Journal."

FOR HIRE

Modern Shovels, Excavators, Tippers

Keen rates quoted for Site Clearance and Excavation at all-in rates

All Road and Building aggregates supplied

R. BARKER (Peckham) LTD. 10a Ellery Street, Peckham, S.E.15 NEW CROSS 3337 PITS - BRASTED 584

DOE'S COLUMN

GRAND CLEARANCE SALE

Shovel and extra Bulldozer Blade. ... &850
LOADING SHOVELS:
1957 Bray BL30 1 cm. yd. Hydraulic LOADING
SHOVEL with full crowd-action Bucket.
Powered by Ford 4D industrial Diesei Engine
with electric starting. Fitted with Operator's
enclosed full-vision comfort Cab. Mounted on
new remould 1400 x 24 rear pneumatics and
very good 750 a 20 fronts. Rebuilt, tested,
resprayed. Guaranteed. ... £1.250
Blads Four-wheel-drive LOADING
Bucket. Has Operator's comfort enclosed widevision Cab. Ford 4D industrial Diesel Engine
with electric starting. On very good 1400 a 24
and 850 x 20 pneumatics. Spotless condition. ... £1.530 and 850 Z 20 pneumatics. Spotiess condi-tion. 11.730
1957 Bray BL430 Four-wheel-drive LOADING SHOVEL, with 1 cu, yd. full crowd-action Bucket, Mounted on nearly new pneumatics, size 1400 x 22 and 10,50 x 16. Full-vision Operator's condort Cab. Overhauled, tested, 1955 Bray 1 cu. yd. Crawler LOADING SHOVEL, completely rebuilt throughout and guaranteed.
1954 Bray HL20 Hydraulic LOADING SHOVEL, with ½ cu. yd. crowd-action Bucket, overhauled throughout and fitted new 1460 z 24 and good throughout and fitted new 1460 z 24 and good throughout and fitted new 1460 z 24 and good with 1½ cu. yd. Bray 1957 Skyhl Heavy-duty LOADING SHOVEL, 1957 Skyhl Heavy-duty LOADING SHOVEL praints. Cycle of Bucket, on good 1400 z 24 and 750 x 20 pneumatics. Powered by Ford 4D Diesel Engine. Cycle of Bray 1950 Chaseside ½ cu. yd. Cable-operated LOADING SHOVEL, provided by a local growth of the present of the prese

ERNEST DOE & SONS LTD. Ulting, Maldon, Essex

Telephones: Day—Hatfield Peverei 311. Sales, Mr. Hall; works, Mr. Bennett; field service, Mr. Claydon; stores, Mr. Woodham. Night—Sales, Hatfield Peverel 319; Service and sparce, Hatfield Peverel 312

FOR SALE,

Smith Super 10, Crane-rigged, Serial No. 18828, late 1955, little used, £1.500.

Another, Serial No. 20629, with Skimmer/Backacter Dinklum DiGGER on Fordson Major Tractor, Diesel, with Skyhl Shovel, 18in. and 2din. Buckets, overhauled and painted, unusually fine machine, £650. Allen TRENCHER, 12/18, Serial No. 7350, Ruston 3VRON, in very nice condition, to clear, £400. Aveilled Stringer, Type BDS, £400.

Nuffield Universal TRACTOR, with Hydraulic Shovel and Dozer Blade, a fine machine, £325.

Muir-Hill Petrol 2yd. DUMPERS, each £50.

Thwaites Diesel 13yd. DUMPERS, each £50.

Thwaites Diesel 13yd. DUMPERS, E85.

Solowert Crawler TRACTORS, 3-cyl., Diesel, £260.

Coventry Climax Petrol WATER PUMPS, £75.

Builders' Mighty HOISTS, 5wt., as new, £25.

Collis 50cwt. Hydraulic Elevated TRUCKS, £350. Exchanges, H.P. FIELDS, Forest Edge, Ringwood Rd., Ferndown, Dorset. 'Phone: Ferndown 837.

CRANE HIRE SPECIALISA OF CONSULT G. LOWER Bristol Road, Bath. CONS. LTD., William of the Consult G. COUNTRY WIDE SERVICE. Phone: Bath 78158-78450.

SALE or HIRE, 85-h.p. standard gauge Diesel LOCOMOTIVE, weight 16 tons, by Motor Rail. JOSEPH PUGSLEY AND SONS, LTD., Bristol, 5. Telephone: Bristol 56037.

BRISTOL

H. A. SAUNDERS LTD., can now offer

I DIGLOADER DUPLEX I ANGLEDOZER

All re-built demonstration machines. Perfect condition.

Phone HILlside 5272

Three late 1958 THWAITES TUSKER 4-wheeled Diesel DUMPERS, capacities 22 cu. ft. wet concrete. Completely reconditioned and guaranteed for three months, resprayed, £325 ex works.

Two THWAITES JUMBO 4-wheeled Diesel DUMPERS, capacities 14 cu. ft. wet concrete. Completely reconditioned, resprayed, and guaranteed for three months, £240 amd £275

THWAITES 3 - wheeled HYDRAULIC PERS, capacities 12 cu. ft. TIPPING DUMPERS, capacities 12 cu.
ALL IN GOOD CONDITION, overhaul
but NOT reconditioned, from £75.

NEALE-WRIGHT

& COMPANY LTD.,

150 PARADE, LEAMINGTON SPA. elephone: Leamington Spa 924 and 220. London Gladstone 8574.

P L A N T F O R S A L E.

1958 Caterpillar 955 TRAXCAVATOR, with
Ripper.

10RB EXCAVATOR, 15500 Series, with Backacter.

Priestman Mk. V. IV and III EXCAVATORS, international TD9, TD14 and TD18 TRACTORS, with
Caterpillar D6, Model 4R, with Hydraulic Angledozer.

Caterpillar D6, Model 4R, with Hydraulic Angledozer.

Caterpillar D7, Model 4T, with Dozer and P.Cu.
Caterpillar D4 and D6 U Series MACHINES.

ROBERTSON, Barkway (Tel. 277), Herts.

C O N V E Y O R B A R G A I N S.

150 18in, x 6in, pitch 8ft. Gravity ROLLER
CONVEYORS at £4 each.

150 18in x 6in, pitch 8ft. Gravity ROLLER
CONVEYORS at £4 each.

150 18in x 6in, pitch 8ft. Gravity ROLLER
CONVEYORS at £4 each.

150 18in x 6in, pitch 9ft. Gravity ROLLER
CONVEYORS at £4 each.

150 18in x 6in, pitch 9ft. Gravity ROLLER
CONVEYORS at £4 each.

150 18in x 6in, pitch 9ft. Gravity ROLLER
CONVEYORS at £4 each.

150 ARRIVATOR OF THE STANDARD OF THE STA

FOR SALE, 43RB EXCAVATOR, fitted prebuilt and as new. — Write Box P.1061, "The Contract Journal."

FOR SALE, Demonstrator Shawnee Poole 7 cu. vd. REAR DUMP, first-class condition, £1.800 o.n.o.—HARTWELL TRACTORS, High Street, Cuddesdon, Oxon. Shawnee Poole Main Distributors.

WANTED, 6in. Blaw Knox Diesel-driven E PUMP.—DAVIES. 20 Whiteladies CONCRETE Road, Bristol, 8.

Diaphragm SALE or HIRE

All types and capacities available

DUKE & OCKENDEN LTD.

28 Victoria Street, London, S.W.I. ABBey 6338 Works: Littlehampton. Phone: SIX

PILING for DISPOSAL

Once driven suitable for re-use

BP4 Larssen Box Piles 200 Tons in lengths 36'-42'

4B Larssen Sheet Piles 400 Tons in lengths 18'-38'

Prices by negotiation

Available for Inspection at

BERKELEY POWER STATION, GLOS. Tel: DURSLEY 2361. EXT. 102.

BALFOUR, BEATTY & CO., LIMITED

GOULD PLANT HIRE LTD.

EASTERN DRYDOCKS

NEWPORT

Telephone: NEWPORT 71496 (Plant Depot)

PLANT HIRE AND GENERAL MACHINERY MERCHANTS

COMPRESSORS · DUMPERS

VIBRATING ROLLERS



CEMENT MIXERS · HOISTS GENERAL CONTRACTORS PLANT

All enquiries to Plant Depot at Newport

Cardiff Office: EMPIRE HOUSE, MOUNTSTUART SQ., CARDIFF Telephone 20732/33 South Wales Agents For: WARRY HOISTS, C. H. JOHNSON (MACHINERY) LTD.

Lincoln 300 amp portable diesel.



Tel: **TOTtenham** 0401 (10 lines)

P L A N T F O R S A L E.
Thornwordt 5 - ton Mk.VII Long wheelbase Coles CRANE, new NR6 Diesel fitted,
reconditioned UD6 International Diesel on generator, electric start, Rope Derricking, insurance
certificates, in very good order, £2,650.
Ingersoil-Rand 5 c.u. Chef Per min, electric start,
masse, on iron wheels, very good working order,
masse, on iron wheels, very good working order,

mobile, on iron wheels, very good working order.
mobile, on iron wheels, very good working order.
mobile, on iron wheels, very good working order.
mobile defined in the condition \$255.
Onlone Hydraulic BATCHING PLANT, Ford 4D Diesel
Mobile Hydraulic BATCHING PLANT, Ford 4D Diesel
Mobile Hydraulic BATCHING PLANT, Ford 4D Diesel
Mobile Hydraulic BATCHING PLANT
man and has never been worked, only on demonstration. Offers around £475.
A.C.E. Sowth MOSTA. Ister Twin Diesel Engine (twin
flywheels). £75 ist 10/7 MIXERS, two with Lister
flow MIXERS, MOSTA.
MIXERS, MOSTA.
MIXERS, MOSTA.
MOS

MCLarentydraulic Equipment, starter, ex No. 4 Ruston, 93d condition, £125, T. MOBILE COMPRESSOR, on pneumatics, 105 cu, ft., Ruston 3VSH Engine, needs attention, 5145, Ble COMPRESSOR, on pneumatics, 160 cu, ft., Ruston 3VRH Engine, needs attention, cu, ft. Ruston 3VRH Engine, needs attention, cu. ft., £150.

£150. G. H. DUNNING. Ballards Yard, High St., Edgware. Tel.: Edgware 2572. Open week-ends.

Ballards Yard, High St., Edgware. Tel.: Edgware 2572.

Open week-ends.

F O R S A L E.

Smith Super 20, new 1948, with Dragline, Skimmer and Backacter Equipment. in excellent condition. Can be seen working at Wigan, Lancs.

10RB 12300 Series, with Skimmer, Backacter and Bradford, Yorkshire. £1,050 o.n.o.

1948 Seddon Diesel LOW-LOADER, 12-ton carrying capacity, ko rear axle. £300.

CORNELL AND CO., Manchester, 13. Rusholme 1769.

SUPRLUS CONVEYOR BELTS. New, unused and second-hand. Most widths up to 36in. in stock for immediate delivery. Second-hand Belts supplied on sale or return basis.

G. Silmeld: 27 B. oomgrove Road (Tel. 64436).

Sheffeld: 27 B. oomgrove Road (Tel. 64436).

South Wales: 1.F.S kingsway Frading Estate, Bridgend (Tel. 1567).

WORKING in the Lancs. and Cheshire area?

WORKING in the Lancs and Cheshire area?

Woolfenden's are your MOBILE CRANE people. Light or heavy. Lorain, Michigan, Quick-Way, Neals, jib lengths to 100ft.

WOOLFENDEN'S,
Anfield, Liverpool, 4. Stoneycroft 3755.

FOR SALE.—We have a few very good practices and success for Lima or similar machines, 312vd., 212vd. and 2vd., complete with pressings.

Dressings.
PLANT SALES, LTD.,
25 Castlereagh Street, London, W.1. PAD. 2663/5. FOR HIRE, RAMMERS, ROLLERS, PUMPS, MOBILE COMPRESSORS: New machines.—'Phone North 7074.

FOR IMMEDIATE HIRE EXCAVATORS, TRAXCAVATORS, BULLDOZERS, COMPRESSORS, MOBILE CRANES, ROLLERS. Keen rates — Low haulage.

SITE CLEARANCE SUB-CONTRACTS

> PLANT HIRE AND SALES, LTD., Milibrook Point Road, Southampton. ne 75271.

CONTRACTORS' PLANT FOR HIRE.

Selection from our comprehensive fleet of Modern Plant

CRAMES (standard gauge):

18-ton Brownhoist, Shunter, 50ft. Jib.
10-ton Coles, shunter, 40ft. Jib.
10-ton Grafton, Diesel, 34ft. Jib.
10-ton Grafton, Diesel, 34ft. Jib.
5-ton Grafton, Diesel, 34ft. Jib.
5-ton Grafton, 50ft. Jib (Wo).
CRAMES (MOBILE ROAD):
Lorain 10-ton, lorry-mounted, extendible Jib, 30/70ft. Jib.

CRANES (MOBILE ROAD):
Lorain 10-ton, lorry-mounted, extendible Jib, 30/70ft.
Ruston 10-ton, track-mounted, 40ft. Jib. Ransomes 812-ton, Diesel, 21ft. Jib. 1942.
Coles 6-ton, Diesel/Electric, new 1948.
Coles 5-ton. Mark 7, on Thornycroft Diesel Chassis.
Lores 4-ton, L44. Diesel, 1948.
Coles 4-ton, Diesel/Electric, new engine.
Jones, 5-ton, Super 40. Three available.
DERRICKS: 7-ton Anderson-Grice, 100ft. Jib. 400.3/50.

DERRICKS: And Super 40. Three available.
7-ton Anderson-Grice, 100ft, lib, 400/3/50.
5-ton Wilson, 70ft, lib, 400/440/3/50.
7-ton Rushworth, Hand, 30ft, lib, 12-ton Smith, Hand, 30ft, lib, new 1952.
EXCA/ATORS.
Toee 10f8s, 1940-51, Shovel and Draglines.
Scood 12vd., Diesel, Shovel and Dragline.
Stephenson Diesel Locos, 150

LOCOS. Stephenson Diesel, Locos. 150-hp. (two).
Stephenson Diesel Locos. 150-hp. (two).
Barciay 80-h.; Ruston 8A-h.p., Diesel.
Bagnall Steam, 14in. x 22in., oil-fired.
Peckett Steam, 7in. x 12in.
BULLDOZERS.

D4 and TD18, fully reconditioned, with Angledozers.

dozers.
PORTABLE BOILERS:
Mobile Oil-fired

Mobile Oil-fired Economic, on pneumatics (1,500th, evaporation); also Static Coal-fired Cochran Cross Tube and Crane Boilers.

AIR COMPRESSORS (on pneumatics); Two 210 c.f.m., 100 p.s.l., Diesel, 1953. Two 160 c.f.m., 100 p.s.l., Diesel, Worthington. ROLLERS: 105 c.f.m., 100 p.s.l., Diesel, Worthington. ROLLERS: 105 c.f.m., 100 p.s.l., Diesel, Broomwade. 12-ton Aveling, Diesel, 912-ton Marshall, Diesel, 5-ton diesel, 105 c.f.m., 105 c

DUMÁR'2-ton Aveling, Diesels (three).

DUMÁR' Muir-Hill 148, Diesel, 4¹2vd.

TRO, Muir-Hill 108, 2¹2vd.

TWO, Muir-Hill 108, 2¹2vd.

TWO, Muir-Hill 108, 2¹2vd.

CONCRETE MIXERS:

Winget 5'.3¹2-, Petrol-driven.

Contrincet Roller Pan Mixer, Diesel, 4ft. 6in. pan.

Contrincet Roller Pan.

Contr

D9, D8, TD18 and TD14 BULLDOZERS and 19, Do., ID16 and ID14 BULLDUZERS and scrapers, Motor Graders. Excavators and new pers for HIRE or SUB-CONTRACT WORK. Includar attention given to finish and compaction, we and modern machines in first-class condition, od operators. Technical staff available to analyse, gramme and price complex projects.

DICK HAMPTON,
Broadview Farm, Blacknest, Alton, Hants.
Telephone: Bentley 2241.

FOR SALE, Modern 12½-ton Coles Self-propelled Diesel CRANE.—8.G. PLANT (SALES AGENCY), LTD., Watlington, Oxon. Watlington 44.

BUNKER CLAMSHELL GATES LEVER OR AIR OPERATED ALL STEEL CONSTRUCTION



MAXIM CONVEYORS (ENGLAND) LTD. BELVEDERE KENT Ring ERITH 4223

PLANT BARGAINS ex Stock.

DINKUM MAJOR and Power Shovel, Cab, 2
Buckets, 1958, £1,650.

Drott 4-in-1 SKID SHOVEL, BTD6, 1958, £2,450.

Kt.44 Jones 4-ton CRANE, pneumatics, Diesel, 24ft.

Benford Model W Reverse Drum 18/12 MIXER.

Scraper and Hydraulic Weigher, complete, 1958, £900.

Aos Hydraulic TRENCHER, late model, 3 Buckets, £900.

Aos Hydraulic TRENCHER, late model, 3 Buckets, £900.

Walls-Stovens 212-ton Diesel ROLLER, Sprinklers, Escon 5/7-ton Low-Load PLANT TRAILER, almost new £350.

Stothert 6-3cwt. Vibrating ROLLER, Spray Gear, £250.

Rapier 410 EXCAVATORS, Diesel, Skimmer, Trencher, Face Showel. From £850.

Stothert 6-3cwt. Vibrating ROLLER, spray Gear, £250.

Stothert 6-3cwt. Vibrating ROLLER, hand propeiled, £85.

Stothert 4-3cwt. Vibrating ROLLER, hand propeiled, £85.

Stothert 6-3cwt. Vibrating ROLLER, hand propeiled, £85.

Stothert 6-3cwt. Vibrating ROLLER, hand propeiled, £85.

Stothert 6-3cwt. Vibrating ROLLER, hand propeiled, £85.

SINKUM DIGGERS, on Diesel Tractors, with Front Shovels. From £650.

Liner 4ft. 6in. Roller Pan MIXER, Petter Diesel, £185.

Aveling-Barford 4-ton Petrol ROLLER, ex Ministry, wery good, £475.

Roller 1900, £475.

Rev 14/10 Closed Drum Diesel MIXER, Ruston Engline, £300.

Stothert 10/7 Diesel MIXER, Power Loader, £175.

Little Benford MIXERS, trade in, need overhaul, £20

3/2 Parker MIXER, on Trailer Chassis, checked over, £60. each.
3/2 Parker MIXER, on Trailer Chassis, checked over,
£60.
Benford 5/31₂ MIXER, high-speed trailer type, Petrol.

Benford 5/31₂ MIXER, no Trailer Chassis, checked over, \$60.

Benford 5/31₂ MIXER, high-speed trailer type, Petrol, £85.

Benford 7/31₃, four steel wheels, Petrol, £65 each.

Climax 2-tool COMPRESSOR, Perkins P4 Diesel, four Chaseside 1₂vd. Rope SHOVEL, Petrol, ex Council, £95.

1,200-gal. TANK, on Ford lorry, good. £125.

Pegson 4in. Contractors' PUMPS, 36,000 g.p.h., crated, ex Ministry and unused, Morris Engine, 115.

Smith. £125.

Smith. £125.

Rapier 5-ton Petrol/Electric CRANE, ex Ministry.

£5350.

Morris 21₂-ton Petrol/Electric CRANE, ex Railways, £350.

Mulr-Hill LOADING SHOVEL, Perkins P6 Diesel, trade Rope. LOADING SHOVEL, Perkins P6 Diesel, trade £195.

In. £195.
Machines 12yd. Portable BINS, four wheels, ex Weighbatcher, £175.
WILLIAM R. SELWOOD, LTD., Chandler's Ford, Hants. 'Phone 2275.

Chandler's Ford, Hants. 'Phone 2275.

A V A I L A B L E F O R H I R E.
EXCAVATORS, BULLDOZERS, DUMPERS,
Including Low-loaders.

BULLDOZERS, DUMPERS,
Including Low-loaders.

AMEY'S AGGREGATES, LTD., wer Wootton, Boars Hill, Oxford. Oxford 35421. FOR SALE, P20 PORTASILO, 20 tons capacity. New 1959. Really excellent condition. DUDLEY VALE, LTD...
3 Buckingham Place, London, S.W.1. ViCtoria 0252.

FOR SALE, PORTASILO, 10-ton, in very good condition.—W. V. DAVIES, Shipston-on-stour. 'Phone 125.

SLOGGETTS (ENGINEERING) Co. Ltd. COMPRESSORS OF ALL TYPES FOR HIRE

2 Burtons Road, Hampton Hill, Middx.

Telephone: Teddington Lock | | 38/9

Hire it from

Phone: SHEldon 2424

ANT SALES LTD.

25 GASTLEREAGN STREET, LONDON, W.1 Telephone: PADdington 2662-4



WILSON PLANT HIRE offer the following:
Priestman Tiger Mk.V EXCAVATOR, No. A7650,
Dorman 4LA Diesel engine, with 2 min. tricks,
any equipments. First-class condition throughout.
Murex WELDING SET. Type GB002, Serial No. 22675,
9-kW 30-V 300-Amp., with Perkins P4 engine,
mounted two pneumatics, with towbar.
Murex WELDING SET. Type GC002, Serial No. 22675,
Serial No. 22675,
Serial No. 22675,
Serial No. 24672,
Serial No. 34112,
Serial No. 3411

Weedon Road, Northampton. Telephone 4653/4.

FORKLIFT TRUCKS of every description for SALE or HIRE. including 7-ton Ross, 4000 6,000lb. Covernor Climax. Electrical and Dissel, all types. Advice given on the type of types. The type of types of typ

FOR HIRE.—Available immediately. 1201 LIMA, fitted with genuine American 100ft. Crane Boom. Back Haul Gear. Bridle, etc., and in first-class condition.—PLANT SALES, LTD., 25 Castlereaph Street, London. W-1. Telephone: Paddington 2663/5.

SLOGGETTS (ENGINEERING) CO., LTD. for HIRE, DINKUM DIGGERS, modern machines. 2 Burtons Road, Hampton Mill, Middlesex. Telephone: Teddington Lock 1138/9.

FOR SALE, £2,750: Drott 4-in-1 SKID SHOVEL. 50-h.p., 1,800 hours since new. Halts. Phone 2275.

THWAITES 15cwt. and 1½yd. Diesel-driven DUMPERS, first-class condition and good tyres. W. V. DAVIES, Shipston-on-Stour. 'Phone 125.

STEEL SHUTTERING FOR SALE OR HIRE

TELEPHONE

TELEPHONE
LONDON: AMBasandor 3456
BIRMINGHAM AREA: Walkall 6085
BRISTOL: Bristol 655244
SOUTH WALES AREA: Penarth 57388
GLASGOW: Bridgeton 1041
LEEDS: Leeds 76514
LEVERPOOL: Aintree 7335
MANCHESTER: Deansgate 7054
RAST COUNTIES AREA: Seaffron Walden 2552
SOUTHAMPTON AREA: Locks Heath 3021

ACROW (ENGINEERS) LTD.

DOE'S COLUMN

GRAND CLEARANCE SALE 10% off all prices quoted for used industrial machines during February.

lozer. Sengine. A smart little Bullozer. 6375 atternational T6 Crawler TRACTOR. Bare lachine. machine. II COUNTY CRAWLER, powered by 4D Diesel Engine, Idin. tracks, with Bray Angledozer. Well maintained, clean machine.

by 4D Diesel Engine, Isin, tracks, with Bray Angledozer. Well maintained, clean machine. June, 1958, Howard Rotary Hoe TEENCHER, powered by Ford 4D Diesel Engine, with electric starting. Rotaped tracks, pipe layer, entit starting. Rotaped tracks, pipe layer, entit starting. Rotaped tracks, pipe layer, entit starting. Angledozer layer and control of the control of

Oliver LOGGING BOW, with 4-ton lift. As new con Hydraulic Heavy-duy RIPPER, 5-30-c to work with Allis-Chalmers HD7, International TD14, or Caterpillar D6 Buildozers. £230 Caterpillar R2, in working order. £230 MacKay Hydraulic ANGLEDOZER EQUIPMENT. 6-10 MacKay Hydraulic ANGLEDOZER EQUIPMENT. 6-10 Complete for Flat 55L. EQUIPMENT. 6-10 Control of the 1955 Thwaites Tusker 1½-ton Four-wheel Dies DUMPER. Overhauled. Choice of for £250 ea

ERNEST DOE & SONS LTD.

Ulting, Maldon, Essex elephones: Day—Hatfield Peverel 311. Sales, tr. Hall; works, Mr. Bennett; field service, Mr. laydon; stores, Mr. Woodham. Night—Sales, Hatfield Peverel 319; Service and area, Hatfield Peverel 312.

CONTRACTORS' PLANT for HIRB.
BTD6 TRACTORS, with Drott Skid Shovels.
BTD6, TD9, TD14, TD18 and TD24 TRACTORS, with
Bullgraders and/or Scrapers.
TD18 TRACTORS, with Pipelaying Equipment.
IORB, 198B and 227B EXCAVATORS, with all equips.
First-class machines and operators, backed by finest field service in Great Britain.
Generous transport terms to all parts TD.
Stratford-on-Avon 4242 and Ashford (Middx.) 4191.

WANTED.
CRAWLER TRACTORS and Bulldozers, any condition; also Parcels of Spares for same. Prompt cash and collect.
PARE PARTS available for TD6, 9, 14, 18, Caterpillar D2, D4, Fowler VF, FD3, Allis M and County.
ROBIN BOSWORTH.

ROBIN BOSWORTH, Tel.: Stoke Saint Milbro 237. Nr. Ludlow, Shropshire.

DELMAG Diesel PILE HAMMERS ... HIRE your machines from Britain's largest fleet. Models D5, D12 and D22 available, with rone suspended leaders and leg guides. Suitable for any section of pile.

of pile.

DUDLEY VALE. LTD.

3 Buckingham Place, London, S.W.1. ViCtoria 0252.

B U C K E T SPECIALISTS.—Special or Standard SHOVEL, TRENCHER, GRAB and DRAGLINE BUCKETs to suit all machines. Quick delivery.—Write or ohone the makers: NORTONS PLANT HIRE, LTD., Billericay, Essex. Tel.: Ramsden Heath 365.

LIMA 1201 Heavy Duty CRANE, fully rigged with genuine American 100ft. Soom and Jury to British maximum rated capacity, fully insured. Available for HIRE with skilled operator.

PLANT SALES, LTD.

5 Castlereagh St., London, W.1. PAddington 2663/5.

CRANE HIRE in the South-west: Latest type Mobile and Crawler Machines. Max. lift 12 tons. lib lengths to 70ft. or 60ft. with 10ft. Fly lib. Hire or Contract.—GRANGE PLANT, LTD., Honiton, Devon. Telephone: Broadhembury 330-355.

FOR SALE, FACE SHOVEL EQUIPMENT for SARB, new 1958, and never used.—Write Box P.1060, "The Contract Journal."

3/2 MIXERS 'Half-Bag' FOR HIRE

30/- PER WEEK

PETROL OR ELECTRIC - I PHASE JOHN MACNAMARA & CO. LTD., Bush Rd., Deptford, London, S.E.B Bermondsey 3275-1435

There is no better medium than

THE CONTRACT JOURNAL

for small classified advertisements

> Telephone for LINAGE RATES to WATerloo 3411

ROAD FORMS ALL TYPES PROPS Numbers 1,2,3,4 Trench Struts Nos. 1, 2, 3 Column Clamps **Trench Sheeting**

RAPID METAL DEVELOPMENTS LTD.

Birmingham — Birchfields 6021 Swansea 50464 London — Tideway 2625 Glasgow — Bridgeton 4214 Exeter 63595 Stockton-on-Tees 64150 Beljast 24591 Liverpool — Simonswood 2482 Dublin 54456

VALES PLANT REGISTER, LTD.
OFFER FOR IMMEDIATE SALE:
410 RANSOMES, *2 CAVATORS.
410 RANSOMES, *2 CAVATORS.
10RB, 10800, Skimmer and Backacter, £900,
10RB, 10800, any one equipment, £1,450,
10RB, 19000 Series, Skimmer ar Backacter or Dragline or F.S. £1,950.
10RB, 22000 Series, Skimmer and Backacter very
1000 condition, £2,500, Dragline, Skimmer and
Backacter Cranes. Very good condition, £1,800,
19RB, *2, 11000 Series, Dragline, £3,150,
22RB, *3, 17000 Series, Dragline, £3,150,
22RB, *3, 17000 Series, Dragline, £3,000.
33RB, 15000 Series, Price on application
24RB, *3, 17000 Series, Dragline, £3,000.
SHAWNEE SCOUTD DIGGER on County Crawler Diesel
Engine, £3,000.
SHAWNEE SCOUTD DIGGER on County Crawler Diesel
Engine, £3,000.
SHAWNEE SCOUTD DIGGER on County Crawler Diesel
FOR TACTOR, with Bray Dozer. New 1954, 1956.
FOR A COMPREHENSIVE FOR YALES FREE PLANT
FOR SALE
FURTHER SENDERS FOR SALE STORE PLANT
FOR SALE
FURTHER SENDERS FOR SALE STORE PLANT
FOR SALE
FURTHER SENDERS FOR SALE STORE PLANT
FOR IMMEDIATE SALE AND REMOVAL

FOR INMEDIATE SALE AND REMOVAL
Morgan 12-ton Electric Derrick CRANE, Bath. Ilb.
Morgan 7-ton Electric Derrick CRANE, 100th.
Morgan 7-ton Electric Derrick CRANE, 100th.
Smith-Rodley 5/20 Diesel Crawler CRANE, 50th. Ilb.
Smith-Rodley 5/20 Diesel Alterical Schale
Settler Crawler Crawler Crawler
For prices and turther particulars, apply:
65 Quayside, Newcastle upon Tyne, 1.

TWO 2-tool Broomwade Portable COMPRESSORS, to Admiralty specifications, fitted with
new Ford AD Engines, March. 1958, maintend of
first-class order as part of hire fleet, offered at 448
each as and where lying London. Also several SV128
Mobile and Lorry-mounted Machines available, prices
on application.—HIRPLANT. LTD., North Circular
Road, Stonebridge Park, N.W.10.

WANTED, 4½cwt. Stothert and Pitt VIBRATING ROLLER, any condition. Telephone: North 7074.

WORKING IN WEST SUSSEX ? ??

Your INQUIRIES for the HIRB of all TYPES of PLANT are invited and will be specially and promptly dealt with an application to:

NEAL'S (PLANT HIRE), LTD., dge Road, Chie Telephone: Chishoster 3777/6/9.

QUICKS FOR FORDS

DIESEL-POWERED

Major Diesel and Hydraulic Loader, with Bucket.

H. & J. QUICK LIMITED

Industrial Machinery Department WILMSLOW RD., CHEADLE, CHES, MERCUry 2345/6/7

HERGARTH



Di tributors York C.B., E. and N.R. Yorkshire, and Lines. New HOWARD SUPER TRENCHER, ex stock New HOWARD SUPER TRENCHER, ex stock
PIPELAYER for same

1,2,575
New J.C.B. HYDRA-DIGGA/LOADALL 56
With power steering, as stock
New SHAWNEE POOLE 7 cu. yd. 9,2
C.B. Mark 1 EXCAVATOR and Loading
J.C.B. Mark 1 EXCAVATOR and Loading
J.C.B. Mark 1 EXCAVATOR and Loading
Shovel
J.C.B. Mark 1 EXCAVATOR and Loading
Shovel 1,100
J.C.B. Mark 1 EXCAVATOR and Loading
J.C.B. Mark 1 EXCAVATOR and Foreign Shovel
J.C.B. Mark 1 EXCAVATOR and Foreign Shovel
J.C.B. Mark 1 EXCAVATOR (without 8uckets)
J.C.B. Mark 1 EXCAVATOR (without 9uckets)
J.C.B. Mark 1 EXCAVATOR (without 9uckets)
SHAWNEE DIGGER and Loading Shovel
SHAWNEE DIGGER and Loading Shovel
SHAWNEE DIGGER and Loading Shovel Skimmer HOWARD STANDARD TRENCHER (900 hours only)
HOWARD 3ft. TRENCHER, Fordson T.V.O.

Guaranteed New and A.1 Reconditioned and Second-hand EXCAVATORS. Draining and Ditching Hydraulic EXCAVATORS.

PART EXCHANGE AND HIRE PURCHASE.

Main Distributors for SHAWNEE POOLE: York C.B. and E. and N.R. Yorks. HERGARTH of YORK

HAWLEY PLANT FOR HIRE.

COMPRESSORS: 2- and 4-tool Portable and Lorry-

CONCRETE MIXERS: 5/312, 10/7, 14/10. CRANES: 15cwt. to 6-ton Mobile; 1- to 25-ton Lorry

mounted.
OROT SHOVELS: 4-in-1 Equipments.
DUMPERS: 1₂, 3₄, 1 and 11₂ cu. yd.
EXCAVATORS: 10RB and 19RB with all Equipments.
PORTASILOS: 13- to 20-ton, with Weighing Equip-

PORTAGE

Market

Marke

Hawley Road, Wilmington, Kent.

FOR SALE,
Hercules & BRICKMAKING PRESS, made by
Herbert Alexander, Ltd., in 1951, approx. cost
£2.500, Serial No. 20292, output 1,200 bricks
per hour, price £670 net.
DUNBRICK MACHINE, output 1,800 bricks per hour,
complete with 80 steel Stillage Racks and 8,000
steel 3-brick Pallets, each rack takes 132 pallets
(396 bricks), price £550 the lot.
BATHCRETE, LTD., Cotswold Works, Standlake,
near Witney, Dona

FOR HIRE, Drott TRACTOR SHOVELS with 4-in-1 Equipment, BTD6 Angledozers, Tippers. Let us quote you for EARTHMOVING, SITE CLEARANCE, EXCAVATION, etc.—WANTZ PLANT HIRE, LTD., 87 Glenny Road, Barking, Essex. Phone: Rippleway 1725, Rainham, Essex, 3844 and 3832.

FOR HIRE.—Available immediately, 1201 LIMA, fitted with genuine American 100ft. Crane Boom, Back Haul Gear, Bridle, etc., and in first-class condition.—PLANT SALES, LTD., 25 Castiereagh St., London, W.1. Telephone: Paddington 2663/5.

FOR SALE, Ransomes Rapier 423, with three equipments. No reasonable offer refused. A. H. HOOKER AND SONS, LTD., Leeds, Maldstone, Kent.

FOR SALE, 54RB EXCAVATOR, new late 1957. Series 22300, fitted Dragline equipment, in first-class condition.—Write Box P.1062, "The Contract Journal."

FOR SALE, CROWD SHOVEL and SKIMMER / BACKACTER EQUIPMENTS for Rapier 423 Excavator.—WILLIAM 6. SEARCH, LTD., Whitehali Road, Leeds, 12. Tel. 639081 (10 lines).

WANTED, SIDE-TIP WAGONS, 4ft. 8\frac{1}{2}in.

gauge, 6 cu. yd. cap: also 2,000vd. 24in. gauge
Track with Turnouts. Tip Wagons, etc.—Full particulars, price. to Box P.1005. "The Contract Journal." FOR SALE, 1-, 2-, 3- and 4-tool Portable Diesel AIR COMPRESSORS, also 2-tool Lorry-mounted Mobile Unit. All excellent condition. Modern machines.—Write Box P,1056. "The Contract Journal."

FOR SALE, KL44 Crawler CRANE.—B.G.
PLANT (SALES AGENCY), LTD., Wattington,
Oxon. Wattington 44.

WANTED, Complete CROWD SHOVEL
EQUIPMENT for Priestman Wolf 3A Excavator
DAVIES, 20 Whiteladies Road, Bristol, 8.

PLLIOTT BROS. (WORTLEY), LTD.

1957 County CRAWLER, with latest type
Internal Arm Bulldozer and Winch and 4yd.

Scraper, perfect and working order, £1,300.

108 Scraper, perfect and working order, £1,300.

Smith Country from new at small Yorks, Town Council, Skimmer and Backacter are Crowd Shovel a specimen machine, Crowd Shovel never been fitted from new, £1,000.

Smith Blackstone Detect. Crane-risged and with the perfect of BROS. (WORTLEY),

able pitching about trench reinstatements, Sprinkiers, £600.

SMITH 2.110 EQUIPMENTS:

One Fowler coll. ENGINE, reconditioned and with new redictor, £130.

One Lattice Dragiline JIB, FAIRLEAD and 3ayd.

BUCKET, £150.

One Universal JIB and FORWARD SHOYEL, £120.

One BACKACTER ARM and BUCKET, £65.

One FORWARD SHOYEL, BUCKET and ARMS, £60.

N.C.M. EQUIPMENTS:

One FACE SHOYEL, Chain Crowd, £130.

One BACKACTER BOOM, ARMS and SHOYEL, £130.

One DRAGLINE JIB, FAIRLEAD and 1ayd, BUCKET, £130.

One BACKACTER BOOM. ARMS and SHOVEL. £130.

One BACKACTER BOOM. ARMS and SHOVEL. £130.

One BACKACTER BOOM. ARMS and SHOVEL. £130.

One Skimmer BUCKET and BOOM, £100.

TRACKS, TRUCK FRAMES and every SPARE for Smith £10 and N.C.H.

Chrysler Diesel Engline, containing the state of the state o

THE UNUSUAL PLANT SERVICE. We claim to have the most comprehensive PLAN
HIRE SERVICE in this country, and you can obta
from us almost everything the bullder requires, from
drain plug to an excavator. Our lorries deliver
the London area every day. Note the telephone No
Brentwood 2116. — SYMES (PLANT), LTD., Ong
Road, Brentwood, Essex.

FOR SALE, Two LIMA 1201s, fitted with Dragline, recently completely reconditioned, Service Exchange engines fitted to both machines this year.—Full details from Box P.1059, "The Contract Journal."

PLANT HIRE.—Earthmoving, Site Clearance, DOUGLAS HAMILTON, LTD., Tunbridge Wells. Telephone: Southborous

NEAGRON (CONSTRUCTION), LTD.

NEAGRON (CUNSTRUCTION),

OFFER FOR SALE:
SLVER KNIGHT 4-berth CARAVANS, 15ft. Sin. long x 5ft. Sin. wide, height 6ft. Sin. all excessary fittings, little used and in perfect condition. JOHNSON Type MA 36ft. Centres PORTABLE CONVEYOR, 24in. Belt, Diesel Engine, pneumatic road wheels, little used, new 1958.

C.P.T. 315 cu. ft. 6-tool COMPRESSOR, Model P84-315, Caterpillar 4T Diesel Engine, new 1955.

NEALS NM 2-ton MOBILE CRANE, 25ft. Straight Lattice lib and 10ft. Insert, Ruston 2VTO Diesel Engine, pneumatic tyres, very good condition. new 1943.

Lattice Jib and 10ft. Insert, Ruston 2VTO Diesei Engline, pneumatic tyres, very good condition, new 1943.

NEALS NMC 2-ton MOBILE CRANES, 30ft. Lattice Jibs. Ruston 2VTH Diesei Englines, crawler-full and the service of the service

condition.

STOTHERT AND PITT 3Cowt. PORTAL CRANE,
400/3/50 Electrics, very little used, new 1955.

10RB 3 cu. yd. EXCAVATOR, Skimmer and Backaster
Equipments, 18in. and 30in. Buckets, Ruston
3YCEN Diesel Engine, excellent condition, new

Equipments, 18in. and 30in. Buckets, Ruston 3YCEN Diesel Engine, excellent condition, new 1958.

9R8 1958.

Cu. vd. EXCAVATOR. Dragline, Skimmer and Backacter Equipments, Ruston Diesel Engine, good working order, new 1951.

Approx. 8,000ft. cube of BAULK TIMBERS. 12in. x 12in., 12in. x 6in., 10in. x 10in., 9in. x 9in. First-class condition.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, Nos. 1, 2, 3 and 4.

ACROW FLOOR CENTRES, N

1 cu. yd. Bucket. Excellent condition.
1 cu. yd. Bucket. Excellent condition.
1 cu. yd. Bucket. Excellent condition.
2 care PillLar D8 TRACTORS, 15A Series, Hydraulic
Dozers and Winches. Very good condition.
2 wincet Lines. Dorman 4DWD Diesel Engline.
3 bucket Lines. Dorman 4DWD Diesel Engline.
4 bucket Lines. Dorman 4DWD Diesel Engline.
4 bucket Lines. Dorman 4DWD Diesel Engline.
5 bucket Lines. Dorman 4DWD Diesel

LONDON DEPOT.
FURTHER DETAILS:
Abbey House, Victoria Street, London, S.W.1.
Telephone: ABBey 5152 (4 lines).

600 PROCESS PLANT FOR SALE

EDGE RUNNER MILL by Clayton Goodfellow, 7ft, dia-cast-iron tapered pan, 9in, deep at sides. Twin tapered rollers, 37in, dia., fitted phosphor bronze scrapers and ploughs. Underdriven through gearbox to counterplant, fitted six-groov were pulleys with

arrapers and processes.

to countershalt, fitted six-groove were pulleys with
to countershalt, after all services of the countershalt of the count

GEORGE COHEN

Sons & Company Limited WOOD LANE, LONDON, W.12. Telephone: Shepherds Bush 2070.
d Stanningley, nr. Leeds. Tel.: Pudsey 2241.

CONTRACTING EQUIPMENT

Two Wild Fawcett Rail-mounted TOWER SLEWING CRANES, manufactured in 1953, with 42ft. 6in. Jib.
One Hilgers Volger Rail-mounted TRAVELLING TOWER CRANE, Model BDK75, Jib 45ft. 6in. Supplied by Mesurs. Abelson and Co.

Two A.C.E. HOISTS, 30cwt. capacity, able to lift to height of 100ft.

One aditional spare WINCH as incosporated with the A.C.E. Hoists.

Two HOPPERS for use with A.C.E. Holsts.

Two BATCH WEIGHING MACHINES, manufactured by Messes. Avery, Birmingham. Three Electric CONCRETE MIXERS.

Two 167 c.f.m. Broomwade COMPRESSORS. One Diesel driven PORTABLE CONCRETE
MIXER.

50 Tracked TOWING AMBULANCES.

J. T. LEAVESLEY, LTD., 'Phone: Alrews 384/5/6.

PLANT HIRE SUGGESTIONS

CONCRETE BREAKING:

H Type Kango Hammers, universal 210/230-V, ideal 12in. concrete, sillent, trouble-free. 26 10s. week.

Compressors, BI hour, including operator. Compressors, Breakers (the self-contained concrete breaker), 24 5s. week.

FLOOR SANDERS:
FLOOR SANDERS:

FLOOR SANDERS:

SWEEK.

Nu-From: RAMMERS: Warsop, £5 week.

TARPAULINS: 18ft. z 12ft., 6/- week; 18ft. z 15ft., 7/6 week. CONCRETE MIXERS: 3/2 Petrol, £1 10s. week. Also complete range

SITE HUTS: 112d. ft. super. week.

WARSOP PUMPS:
2in, 6,000 gallons per hour, 24 5s. week.
RAILWAY SLEEPERS:
8ft. 6in. x 10in. x 5in., 10el. week.
ALSO COMPLETE RANGH OF MECHANICAL
AND NON-MECHANICAL PLANT

CAMPBELL-GRAY LTD.

68/70 Pengs Rd., South Nerwood, London, S.E.25 Telephone: SYD. 3131 (3 lines)



MOBILE & PORTABLE AIR COMPRESSORS PNEUMATIC TOOLS DERRICKS DUMPERS ETC.

VENTRY COMPRESSO

Stewarts Road, Battersea, S.W.B . Tel: Macaulay 7231 (3 lines)

CONTRACTORS' PLANT for SALE or HIRE.

Ruston 33RB, 15222 Sec. 1522 Sec. 1522

working order, £575.
Priestman Cub Mk. III (choice three), from £175.
Ransomes and Rapler 431 34vd. Face Shovel and Backacter, £450.
CRANES:
Coles 5-ton EMA, fully alewing, Rope Derrick, on Thornvorto Diesel, 6 v 4 Short Chassis, good working order, may be inspected at work, £1,950.
Neals NM 2-ton, Diesel Engine, on pneumatics, fully slewing, £650.
Jones Super 20, Diesel, on pneumatics, fully slewing, £650.
Jones Super 20, Diesel, on pneumatics, fully slewing, ex Ministry, done very little work from new, very morts 215.
Morris 21-ton and 5-ton, ex Ministry, practically unused, from £275.
Mercer, on solids, 3-ton, good working order, £250.
Taractors AND DOZERS:
Caterpillar D8, 88 Series, complete, Double Drum P.C.U., very good working order, £1,450.
Caterpillar D8, 2U Series, with Le Tourneau P.C.U., may be seen working, £1,850.
Caterpillar D8, 2U Series, with Le Tourneau P.C.U., may be seen working, £1,850.
Caterpillar D8, 2U 7900 Series, fitted Caterpillar Winches (choice two), one with Cable Angledozer, may be seen working, £1,850.
Caterpillar D7, 7M, ex Ministry machine, as new, £1,950.
Caterpillar D7, 3T Series, fitted Caterpillar Winches (choice two), one with Cable Angledozer and Onions P.C.U., ex Ministry, as new, £2,950.
Caterpillar D7, 3T Series, fitted Caterpillar D7, 3T 1700 Series, fitted Birtley Hydraulic Angledozer, very good condition, £3,250.
Caterpillar D4, 2T Series, fitted Hydraulic Angledozer, overhauled, good working order, £1,150.
L.P.C. Hydraulic Angledozer, Caterpillar D4, 2T Series, fitted LP.C. Hydraulic Angledozer, good working order, £1,150.
L.P.C. Hydraulic Angledozer, caterpillar D4, 2T Series, fitted LP.C. Hydraulic Angledozer, good working order, £1,150.
L.P.C. Hydraulic Angledozer, caterpillar D4, 4T Series, fitted LP.C. Hydraulic Angledozer, good working order, £1,150.
International TD24, fitted Ruston P.C.U., checked throughut and resprayed, ready for work, 22,750.
International TD18, with Hydraulic Angledozer and P24 Winch, very good condition, may be seen

International TD24, fitted Ruston P.C.U., checked throughout and resprayed, ready for work. £2.750. International TD18, with Hydraulic Angledozer and P.24 Winds and the P.24 Winds and the P.24 Winds and P.25 Winds an

Caterpillar D8 END COLLARS, 789966 and 7, 350 of each.

"A" FRAMES for L.P.C. Equipment, D7 and D8, ex ANGLEDOZER BLADES for L.P.C. Equipment, D7 and D8, ex BLADES for L.P.C. Equipment, for D6, new. ex Ministry, £65 each.

EX Government Stock Heavy Engine and Gear Oil in 41z-gallon jerry cans at 25s. per can. Analysis on request.

MITCHAM AND SONS, Burwell, Cambs. Burwell 226.

MITCHAM AND SONS, Burwell, Cambs. Burwell 226.

FOR SALE.

LOW-LOADER TRAILER 10-ton, K.O. Axle. £350.
LOW-LOADER TRAILER 10-ton, K.O. Axle. £350.
117 Baldock Road, Letchworth, Herts.

FOR IMM EDIATE HIRE, LTD.,

KL44 MOBILE CRANES, oneumatics, Jibs up to Soft.
DUDLEY VALE LTD.,

Buckingham Place, London, S.W.1. Tel.: VIC. 0252.

AIR COMPRESSORS FOR SALE,
Two Bellis and Morcom 2.450 c.f.m., 100 p.s.i.,
550-h.p. motor, Broomwade 500 c.f.m., EH251: 400
c.f.m., EH245: 300 c.f.m., EH260: 150 c.f.m., D22A:
100 c.f.m., EP660: also numerous others of all makes:
and AIR RECEIVERS from 1ft. to 9ft. dia., 100lb.
to 1,000lb., w.p.
FRED WATKINS (ENGINEERING), LTD.,
Coleford, Glos. "Phone: Coleford 2271/2. SALE.

SLOGGETTS (ENGINEERING) CO., LTD.

2 Burtons Road, Hampton Hill, Middlesex. Telephone: Teddington Lock 1138/9.

FOR SALE, one late 15A D8 Caterpillar TRACTOR, complete with Birtley Cabledozer Equipment, Onions 15/21yd. Scraper M1 1001, all in A1 condition.—Write Box 0.0.383, "The Contract Journal."

R SALE, No. O Rotosnap ROTARY CRUSHER, including spare Hammers and Liners, —SUTTON STONE CO., LTD., Armthorpe, near

WANTED, S/h. Onions Model 10 C.C.U. (Scraper Winch) for County Crawler.—TENET CONSTRUCTION CO., 14 Longsight Lane, Cheadle Hulme, Cheshire. Tels: Hulme Hall 1906.

FOR SALE, Three Stothert and Pitt 28in.
Hand-guided Vibratory ROLLERS. — CHESTERFIELD PLANT HIRE, LTD., Walton Road, Chesterfield.
Tel.: Chesterfield 4152/3.

R SALE, 33RB EXCAVATOR, with Dragline Equipment, Machine No. 4985, price red £1,900. — G. H. WATKINS, Crown East, FOR

FOR HIRE, 15-ton NCK Lorry-mounted CRANE, 70ft. Main Boom, 15ft. Fly.
S. BUTTERWORTH, LTD.,
Winterton Road, Scunthorpe (2097), Lincs.

Works RECONDITIONED DUMPERS

"NEW" MACHINES-- Second hand Prices GRAYSTONS OFFER FOR SALE,
OP.203.—198B EXCAVATOR, 10700 Series,
Normer/Backacter Equipment, £1,400.
P.205.—22RB EXCAVATOR, 19867 Series,
Enos.—22RB EXCAVATOR, 19867 Series,
Enos.—22RB EXCAVATOR, 19867 Series,
Enuipment, £3,200.
E.1085.—23RB EXCAVATOR, 17000 Series, Dragiline
Equipment, £3,200.
Equipment, £3,200.
Equipment, ery good condition, £3,000.
OP.201.—NCK304 EXCAVATOR, 1020 Series, Dragiline
Equipment, very good condition, £3,000.
OP.201.—NCK304 EXCAVATOR, 1020 Series, Equipment,
powered by Thornycroft NR6 Diesel Engine, very
good condition, £2,400.
E.1089.—43RB EXCAVATOR, 10200 Series, F/S
Equipment, £2,400.
E.1089.—43RB EXCAVATOR, 2000 Series, F/S
Equipment, £2,500.
E.1089.—43RB EXCAVATOR, 2000 Series, long and
wide tracks, 60ft. Dragiline Equipment, 1,2 ct. vd.
Bucket, worked less than 12 months, excellent
condition, £1,200.
E.826.—NCK304 EXCAVATOR, Dragiline Equipment,
OP.199.—19RB, Skimmer/Backacter Equipment,
E.275.
OP.199.—19RB, Dragiline Equipment, Butt-type jib,
£325.
E.110b.—Michigan C16 EXCAVATOR, with Skimmer/
Backacter, Face Shovel, Dragiline and Crane
Backacter, Face Shovel, Dragiline and Crane
PRESSOR, £345.
A.604.—Broomwade SVD1 110 c.f.m. Diesel COMPRESSOR, £355.
A.604.—Broomwade SVD1 110 c.f.m. Diesel COMPRESSOR, £354.
A.604.—Broomwade SVD3 350 c.f.m. Diesel COMPRESSOR, £375.
C.758.—Dalli Hand Scraper WinCHES, £165 each.
P.47.—Several 4in. and 6in. Diaphragm and Centritiogal PUMPS, Diesel, very good condition. Price
PLANT, with 40-ton Hopper, reconditioned, £1,850.
C.781.—Coles 3-ton Diesel Electric Mobile CRANE,
16ft, 1jb, overhailed, £700.
OP.198.—Neals CM MOBILE CRANE, 4/6-ton, with
30ft.—Neals CM MOBILE CRANE, Ruston Diesel
Engine, Jib up to 35ft. Straight Lattice, gwad
condition, £1,075.
OP.178.—Neals GCRANE, 1000.
D.126.—Neals CM MOBILE CRANE, 4/6-ton, with
30ft.—Neals CM MOBILE CRANE, Ruston Diesel
Engine, Jib up to 35ft. Straight Lattice, gwad
condition, £1,075.
OP.178.—Neals GCRANE, 1000.
D.126.—Neals CM MOBILE CRANE, 4/6-ton, with
30ft.—Neals CM MOBILE CRANE, 4/6-ton,

FOR SALE

TOTAL TRACTOR, No. 612774, with BucyrusFIRE BUIlgrader and P24 P.C.U., price £950.

10RB EXCAVATOR, No. 8403, with Skimmer and
Backacter Equipments, price £700.

Apply TILBURY CONSTRUCTION CO., LTD.,
RUSCOMBe WOrks, Twyford, Berks,
Tel.: Twyford 177 (four lines).

A DVERTISER wishes to PURCHASE modern 10RB, 19RB and 22RB Ruston-Bucyrus EXCAVATORS of not earlier than 18500 Series, preferably with Dragline, Skimmer or Backacter Equipments.—Please send full details, including inspection address and lowest price, to CONTRACTORS' PLANT HRING CO., LTD., Barkby Road, Lelcester.

FOR SALE, 11-ton Aveling-Barford ROAD
ROLLER, Ruston 4VSOR Diesel Engine, power
steering, Water Sprinklers—WILLIAM G. SEARCH,
LTD., Whitehall Road, Leeds, 12. Tel. 639081
(10 lines).

WANTED urgently, 490 EXCAVATOR, all-electric, with Shovel Equipment. Must be in first-class condition. — Write Box P.1169, "The Contract Journal."

FOR SAI.E, 10 Stothert and Pitt 10/7 Petrol-engined CONCRETE MIXERS. in excellent condi-tion, ex Admiralty, £75 each.—I. W. VASS. LTD., Ampthill, Bedford. Telephone: Ampthill 3255.

W A N T E D.

Two D8 2U BULLDOZERS.

Two LP LE Tourneau SCRAPERS.

Write Box P.1079, "The Contract Journal."

ALLEN 12/21 for SALE, good condition,

£1,000.—WHITEHEAD OF MANSFIELD, Mansfield (Tel. 1321), Notts.

AVAILABLE for HIRE or CONTRACT,
D9 and D8 TRACTORS with Blade or Scraper.
ELLIOTT, Wetherby Road, York. Tel. 78220 & 78501. HOIST, A.C.E. Comet Junior, pneumatics, Petter Diesel.—GORE, 12 Tavistock Road, E.18. WANstead 1909.

CAR

REBUILT BY THE MANUFACTURERS

GEORGE FOWELL LTD DUMPER MANUFACTURERS

WALSALL ST., WEST BROMWICH

A "G.F." WARRANTY IS YOUR GUARANTEE

OF SATISFACTION

Further Details-

WEST BROM 1063/4

Modern Diesel

COMPRESSORS

EXCAVATORS TRENCHERS BULLDOZERS



HIRE-SALES-SERVICE

Modern Diesel

ROLLERS

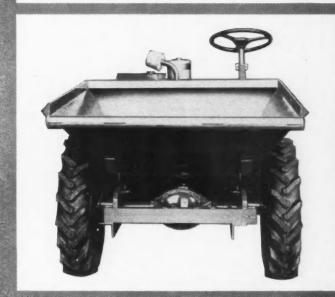
DUMPERS MIXERS PUMPS, ETC.

146 HILLS ROAD, CAMBRIDGE. Phone: 87519

A new narrow dumper from

Thwaites

The SPRITE dumper gives you the reliability & ruggedness of BIG dumper performance in NARROW form without increasing loading height



49½ inches wide SPRITE takes a load 13 cu.ft. water level '3 speed box adds speed to compact design for more payload per day even in cramped conditions

£332.10 del On site in 24 hours

Thwaites

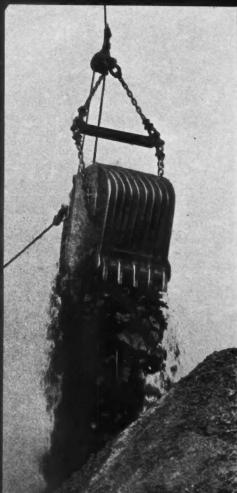
THWAITES ENGINEERING CO. LTD . CUBBINGTON LEAMINGTON SPA . Tel: 3089

THE CONTRACT JOURNAL 11/2/60 SUPPLEMENT ix a









RAPIER



Standardise on NCK-RapieR

FACESHOVELS · DRAGSHOVELS · DRAGLINES · SKOOPERS

from $\frac{3}{8}$ cu. yd. to 4 cu. yd. capacity — plus an unbeatable range of extra-long-boom cranes up to 56 tons capacity.



NCK-RapieR machines are tough, fast and completely versatile, with front-end attachments to suit every need. NCK-RapieR's after-sales service keeps your equipment in peak condition throughout its long life. Another great advantage: you can specify your engine...Rolls-Royce, Dorman, A.E.C., Cummins etc.

N.C.K. RAPIER SALES COMPANY LTD., 32 VICTORIA STREET, LONDON, S.W.1

Telephone: Abbey 6738/9 Cables: Excasales, London



Reproduced by courtesy of J. Rawlinson, Esq., C.B.E., M.Eng., M.I.C.E., Chief Engineer, London County Council

Staveley pipes of 30 and 54 inch diameter were used in the Beckton sewage outfall project.

They formed twin mains, the 30 inch pipes connected with Staveley bolt type flexible joints.

Cast iron is immensely strong, resists corrosion and has a very long life.



THE STAVELEY IRON & CHEMICAL CO. LTD.

NR. CHESTERFIELD

DERBYSHIRE

TEL: CHESTERFIELD 7251

SIR ALFRED MCALPINE & SON LIMITED **AGAIN CHOOSE CATERPILLAR EARTHMOVING EQUIPMENT**



and profit by CATERPILLAR dependability high economical output, long life and, of course, Leverton service.

Proof indeed of superior dependability and service - Sir Alfred McAlpine & Son Limited recently replaced six early type D8 Crawler Tractors, after many years continuous service, with six of the new British Built Series "H" Caterpillar Crawler Tractors and Equipments. SOLD AND SERVICED BY YOUR CATERPILLAR DEALER

ERTON

THE LEVERTON GROUP OF COMPARENTED

SPALDING Spaiding, Lines. Televia Meling 222

LEEDS Gildersome, Leeds. To

NEWCASTLE Team Valley

WIGAN Wigan Rd., Bry ROTHERHAM Mead

at and Tel: LOW Fell 78511 (4 lines) Tol- ASHton-in-Makerfield 7675



ARUP & ARUP LTD., COLQUHOUN HOUSE, BROADWICK ST., LONDON W.I.

for a complete track service



(Photograph by courtesy of the National Coal Board)

SURVEY · DESIGN
SUPPLY
INSTALLATION

EAGRE-

Part of a £500,000 contract by Eagre—sidings and trackwork for Manvers Centralization Scheme (about three fifths of the project is shown in this aerial view). 9,000 tons of iron and steel, 40 miles of track, 230 turnouts were laid with no interruption of the existing traffic of the four collieries involved in the scheme.

Eagre also works for British Railways, the Gas Board, the United Steel Companies, Central Electricity Authoricy, etc. Materials are supplied from Eagre's own resources.

Whatever the magnitude of your siding requirements, consult—

EAGRE CONSTRUCTION CO. LTD.

East Common Lane . SCUNTHORPE . Lincs.

Tel. 4513 (5-lines)

February 11 1960

THE CONTRACT JOURNAL

xv a

Be on Good HIRE terms...with

MOBILE HAULAGE

230 TOTTENHAM COURT RD

LONDON. W.1.

Phone

LANGHAM 7833

CO.LTD



CHASESIDE

A GREAT NAME WITH LOCAL AUTHORITIES



tograph by courtesy of The Luton Corporation

For many years the Chaseside Loading Shovel has been an essential item of equipment for Local Authorities both large and small. The new Loadmaster sets an even higher standard of efficiency. It is most effective on road improvement and maintenance, ideal for use on the controlled tip, more versatile and productive in the depot and invaluable when snow comes.

Chaseside Loadmasters combine the virtues of strength, speed, economy, durability and ease of operation and maintenance which together mean real cost reductions on a job tackled by a Chaseside.

Backed by 17 Service Centres throughout the United Kingdom.

For details of the complete range of Chaseside shovels write to:

THASESIDE ENGINEERING CO. LTD.
(A subsidiary of British Northrop Limited)
Station Works, Hertford, Herts.
Tel: Hertford 3113 Grams: Chaseside, Hertford



00, 2000, 3000, WHEEL DRIVE SERIES



LOADMASTER 700



LOADMASTER BOOTC



LOADMASTER SOO



LOADMASTER 550 'HI-LOAD



'HI-SPEED' DUMPE



NEW SELF-PROPELLED 'HOPTO

400 users of BEDFORD-LACRE SWEEPERS



appreciate these advantages

Sweeping efficiency.—The narrow-width curved main brush and the vertical wire gutter brush are both fully floating and combine to give an extremely clean finish to the area of the road where most dirt and litter collects.

Low operating costs.—The Bedford-Lacre sweeper is designed to give optimum efficiency of sweep with the minimum brush width; expenditure on brush equipment is 50 per cent. less than on any comparable vehicle.

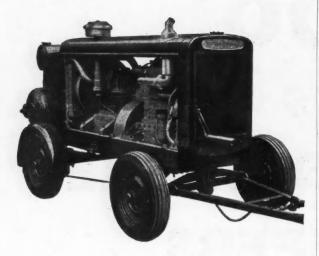
Simple maintenance and low-priced spares.—The simple design of the sweeper ensures excellent accessibility; genuine Bedford spares and service are readily available from all Bedford dealers, and Lacre parts are obtainable from stockists strategically placed throughout the country.

Low initial cost.—The cost of the Bedford-Lacre is far lower than that of any comparable sweeper.

400 Bedford-Lacre sweeper-collectors are now in service throughout the country and many repeat orders have been placed. For details see your Bedford dealer or write to us direct.

LACRE LTD., HATFIELD ROAD, ST. ALBANS, HERTS. Tel: 55471

ROBUST...



Reliable

We design and build air compressors

up to 210 c.f.m. F.A.D., trailer,
stationary and semi-mobile. Compressors

on special-purpose mountings
can be produced quickly and at

competitive prices. If you

use compressors for any purpose

it is worth while writing

for particulars of our machines,

Makers of pure
'LEAD WOOL'
for pipe jointing;
caulking tools
and pipeline
tes:ing equipment.
Suppliers of high
quality base
metal—powders,
solders, etc.



THE LEAD WOOL CO LTD SNODLAND KENT

Phone: Snodland 516-7 Telegrams: Strength Phone Snodland

PLANT FOR SALE

Butters 3-ton 100' Jib Electric Derrick.

Two 30-cwt. Rushworth all-steel Hand Derricks.

One 2-ton similar.

Barber-Greene 44C Trencher recent model—digs to 7' deep.

19-RB, 10-RB and Smith-420 Excavators complete with all equipments.

Steam Pumps by Pulsometer, Tangye and Evans, various types and sizes.

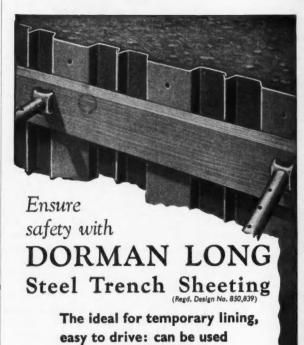
Electric Centrifugal Pumps by Harland, Labour, Pulsometer etc. Various capacities 2" to 5".

For full details of the above, please write or telephone

THE NORWEST CONSTRUCTION CO. LTD.

PLANT DEPARTMENT,
DUNNINGS BRIDGE ROAD, LIVERPOOL 10

Phone: Aintree 3651 Extension 28



over and over again

PROMPT DELIVERY

Prices and full particulars on application to
DORMAN LONG (Steel) LTD., SHEET DEPT.,
AYRTON WORKS, MIDDLESBROUGH
Landon Office: Terminal House, 52 Grosvenor Gardens, S.W.I

Architects **SPECIFY**

Builders & Contractors
RECOMMEND

Hospitals & Public Authorities

APPROVE

POLYBOND

Universal Adhesive

The efficient modern adhesive for TIMBER • TILES • PLASTIC SHEETS METAL • GLASS • CONCRETE AND PLASTER

Foam POLYSTYRENE PANELS fixed simply and without difficulty

The efficient modern sealer for all materials especially concrete & plaster



AND ALL FROM THE SAME LOW-COST CAN

POLYBOND universal adhesive

For technical advice and the name of your nearest stockist write or telephone the manufacturers:—

POLYBOND LTD., SOUTHAMPTON

Telephone - - - Locksheath 3372



(Oxford) LTD. Long Lane, Littlemore, OXFORD Tel: 78241/2/3 Wokingham Depot Tel: 75

Site Huts



Photograph by courtesy of Alexander Finley & Co. Ltd., Motherwell.

FREE DELIVERY ENGLAND WALES

We can quickly supply Redwood Weatherboard Site Huts in standard sizes, or to your own specification, as already used by many leading contractors.

SHEEPSCAR CORNER, LEEDS 7 Tel: 31509 & 25637



No matter how hard the job is-Flygt Pumps can cope

They are remarkably robust and are designed for extreme conditions on contract sites. Flygt pumps are all electric, fully submersible, require no supervision, are rubber lined to resist abrasion and will deal effectively with water with a high percentage of solids, slurry and other abrasives. They are silent in operation, do not need priming and will run "on snore" for hours. They are ideal for use in coffer dams, tunnels, shafts, sumps and for general de-watering and drainage. Capacities up to 2,100 gallons per minute and heads up to 150 feet. Write now for technical literature on Flygt contractor pumps and the latest Flygt sewage pumping installation to: pumps and ti-installation to:-

INDUSTRIAL PUMPS LIMITED

20 Bentinck Road · Hyson Green · Nottingham FLYGT PUMPS FOR SALE OR HIRE Telephone 75182/3. B. 80 M 5 H.P. Weight 140 lb. Delivery 3' Capacity 45 G.P.M. at 80 ft. Head —200 G.P.M. at 20 ft. Head.

B. 150/200 56 H.P. Weight 1300 lb. Delivery 6" or 8". Capacity 200 G.P.M. at 150 ft. Head—2,100 G.P.M. at 20 ft. Head.







B. 80 L. 5 H.P. Weight 183 lb. Delivery 3". Capacity 200 G.P.M. at 20 ft. Head 45 G.P.M. at 83 ft. Head. High Het Imbeller gives up to 130 ft. Head.

B. 38 L. | 1½ H.P. Weight 79 lb. Delivery 1½". Capacity 10 G.P.M. at 55 ft. Head — 40 G.P.M. at 20 ft. Head.





960



WEDNESBURY

of course

NOW A FURTHER IMPROVEMENT TO "WEDNESBURY" QUALITY
IN MARKED SIZES OF BS 659

Extensive research has led to the introduction of new drawing media, purging and burnishing, making carbonaceous and oxide films virtually impossible.

All "Wednesbury" tube is solid drawn by the most efficient and modern processes, under strict laboratory supervision from raw material to finished tube. *Stocked in the sizes and gauges you want for prompt delivery. By specifying "Wednesbury" you save time and expense.

The WEDNESBURY TUBE CO. LTD., BILSTON, STAFFS

Tel: BILSTON 41133 (9 lines)

Associated Company: Glynn Bros. Ltd., London and Manchester. South Wales Warehouse: Penarth Road, Cardiff (Tel: 22502)

Manufacturers of

Lead Sheet & Pipe: Plastic Tube and Fittings; Steel Tubes & Fittings: Steel Tube Fabrications: Malleable Tube Fittings

SENSATIONAL M.O.S. PURCHASE



- GIVES INSTANT HEAT.
- TERRIFIC OUTPUT.
 SAFE AND SMOKELESS.
 ECONOMICAL TO RUN.
 FULLY PORTABLE.
 COOKS AS WELL

Runs on commercial grade paraffin using from $\frac{1}{2}$ -5 pints per hour, fully adjustable up to maximum output 50,000 B.T.U.s per hour (approx. 17 kw.). Will heat up to 15,000 cubic fest.

Can be used out of doors to protect both men and job. Ideal spare heater for garages, workshops, farms, etc.

Complete with stove pipe, fuel hose, etc. alone worth 42/6, Ex-W.D. Jerrican 12/6 extra,



5 o'clock on Saturdays Obtainable only



D. A. MULLARD & CO. LTD.

(C.J.6) B.R. GOODS DEPOT STATION ROAD, EDGWARE, MIDDX.



SURVEYS CLEARANCE · WELDING **CUTTING · CONSTRUCTION** MAINTENANCE

Teams of expert diver engineers with specialised equipment are on hand to operate anywhere in the United Kingdom . . . or the world. Write for full details, or put your problems direct. Diving Equipment, Welding Generators, Compressors and other plant for HIRE.

UNDER WATER WELDERS LTD. REPAIRERS ROATH BASIN . CARDIFF

Telephone: 29631-2-3 (After Hours: Gobion (Mon) 200 or Penarth 58131) London Office: 91 Princedale Road, London, W.11. Telephone: Park 4468

DON'T File this Send for Catalogue 594

> **Tubeclamps** are designed to suit standard scaffolding tubing. Also

for I", 11, 2" and 21" nominal bore. Tubeclamps

Telegrams:
TUBECLAMPS SOWEST LONDON

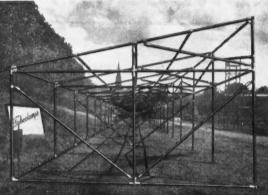
Cables :
TUBECLAMPS LONDON





SHORT TEE









KING POST FITTING





ELBOW



JOINTING SLEEVE







CROSSOVER



SOCKET CROSS



CORNER FITTING

Works OLD HILL STAFFORDSHIRE

Telephone

Tubeclamps LIMITED

Telephone SLOANE

1498 or 7291 - 2 - 3

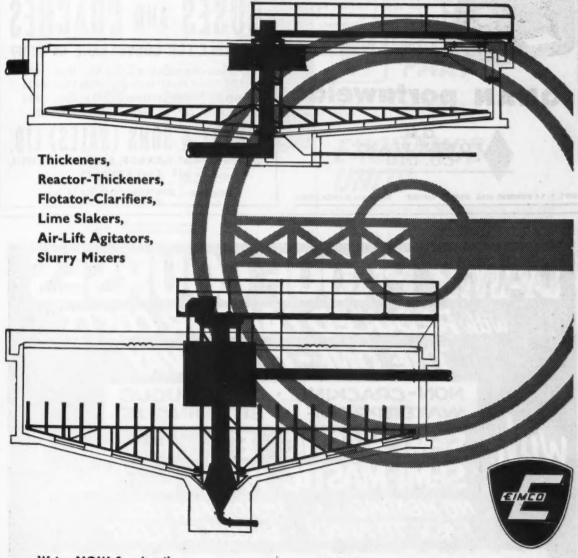
CRADLEY HEATH 69181 - 2-3-4-5

LONDON, S.W.1

ENCOPROCESS MOW AVAILABLE

FROM BRITISH PRODUCTION

For Sewage and Industrial Waste Treatment



Write NOW for details:-

EIMCO (GREAT BRITAIN) LIMITED

Head Office and Works: TEAM VALLEY, GATESHEAD, II, CO. DURHAM. LOW FELL 7-7241.

P.2000

ONAN Portable Electric Plants

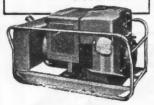
Cut Costs! Save Time!

Take 'em anywhere . . . plug in for power, 205AJ models shown here develop 2500 watts A.C., have four plug-ins, operate several tools and lights at once. Onan 4-cycle-engine-powered for easy starting, long life. Compact, sturdy, light weight. Carrying frame and recoil starter standard equipment. 2-wheel dolly optional.



Take it right to the job . . . anywhere! Weighs only 405 pounds . . . can be trucked, carried or wheeled. Excellent are stability, dual current controls. Handles electrodes up to 3/16-inch diameter. Provides 1500 watts A.C. for lights and motor-driven tools. Powered by Onan, two-cylinder, air-cooled gasoline engine.

Portable 200 amp. D.C. WELDER



ONAN portaweld



E DEPT. F, 1-3 RICHMOND ROAD IPSWICH, SUFFOLK Telephone: IPSWICH 81795/6



BUSES AND COACHES

SUITABLE FOR CONVEYANCE OF STAFF

29 Seater Petrol Engine Coaches from £95 33/35 Seater Diesel Engine Coaches from £125 Buses for Mobile Canteens & Offices from £35

PLEASE LET US HAVE YOUR ENQUIRIES

KIRKBY & SONS (SALES) LTD.

CROSS ROADS GARAGE, SOUTH ANSTON,

NR SHEFFIELD

Telephone: DINNINGTON 541 (4 lines)

DAMP PROOF COURSES with REDUCED LABOUR COSTS THE ONE-COAT WAY

NON-CRACKING · CONTINUATER PROOF · BITUM

SEMI-MASTIC 'E' (for dry surfaces)
SEMI-MASTIC '197' (for damp surfaces)

NO HEATING · READY FOR USE EASY TO APPLY · BRUSH OR FLOAT

THE MANUFACTERERS OF:

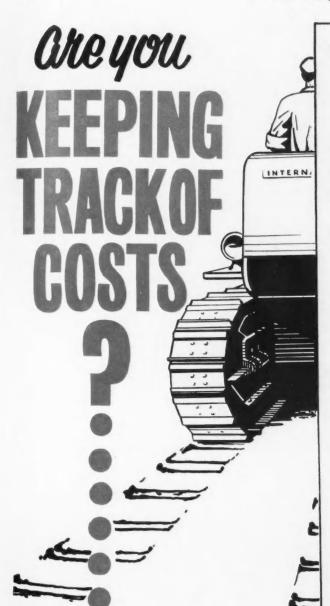
RITO for Joints • RITOLASTIC Coatings for Protection • ROMANITE for dampwalls WRITE FOR DETAILS TO:

ANDREW MAXWELL DIVISION

(THE LIVERPOOL BORAX CO.LID)

MAXWELL HOUSE ' ST. PAULS SQUARE

· LIVERPOOL.3



Savilles expert and comprehensive service organisation is designed specifically to save both time and money for all users of International machines. Factory trained specialists ensure first-class work, the use of I.H. parts only means long term reliability, and Savilles comprehensive facilities means prompt service and at the lowest possible rates.

TRACK RE-CONDITIONING

Genuine I.H. parts only are used; our mechanics are factory-trained specialists, we carry the largest stocks of I.H. parts in Gt. Britain; we collect and deliver free of charge; and our recently introduced "reduced charges" scheme (folder sent on request) means, for you, tip-top work at the lowest cost.



SPARE PARTS

We carry the largest stocks of I.H. spares in the country - this guarantees prompt service all the time.

EXCHANGE UNITS

Every unit carries the Saville guarantee. Complete engines, fuel pumps and injectors, dynamos, starters, magnetos. hydraulic pumps and cylinders, and etc. The Saville Exchange Units Plan can save you time and money.

RUSTON-HORNSBY REPAIRS & SPARES

We are approved repairers for all Ruston-Hornsby engines, fuel pumps and injectors. A full range of spares always in stock - you'll save time if you ask Savilles for R.H. spares.

SAVILES for SERVICE

SAVILLE (Tractors) LTD

A Company of the LUMLEY-SAVILLE Organisation

STRATFORD-ON-AVON

Telephone: 4242 (15 lines) Telex. Birmingham 31633 LONDON

Tel: ASHFORD Middx. 4191 (10 lines) Telex. London 24117 CARDIFF

Tel: 33572/3 Telex. Cardiff 49250 BELFAST Tel: DUNMURRY 2511

IRELAND—Sole distributors for INTERNATIONAL HARVESTER, J. H. SAVILLE & CO. LTD.

Tel: Dublin 373696 (5 lines)

GETTHE BIG SHOVEL!



International construction

INTERNATIONAL HARVESTER COMPANY OF GREAT BRITAIN LIMITED . HARVESTER HOUSE

the 3 cubic yard



259 CITY ROAD . LONDON ECI

INTERNATIONAL DROTT

B-20K-3 OF COURSE

IT WILL PAY YOU TO HAVE one of these big British shovels, especially where there's a tight schedule to be met. You'll be glad of it for two big reasons. First it incorporates all the proven Drott pioneered features which have established the name as number one in the loader industry. The new shovel also incorporates extra refinements such as adjustable automatic kick-out and a pin-mounted loader frame. Your second reason for being glad you've got this unit? This big Drott is teamed with the International BTD-20 with its six-speed full-reverse transmission that boosts production on any shuttle job. It's at work in seconds with real push-button starting, and the Rolls-Royce direct injection engine is a real fuel-miser! Your International Construction Dealer will be glad to tell you more about this equipment Why not call him? AND it's available with that very versatile International Drott 4-in-1 bucket . . . four big-capacity tools available at the flick of a lever: Bulldozer, Carry-Type Scraper, Shovel and Clamshell. There's another exclusive advantage with a 4-in-1, controlled bottom-dumping that lets you place the 3 cubic yard load more gently in light-duty trucks. CONSTRUCTION EQUIPMENT DEALERS IN GT. BRITAIN AND N. IRELAND JAMES BOWEN & SONS LTD EDINBURGH, GLASGOW & ABERDEEN R. CRIPPS & CO. LTD NOTTINGHAM, MANCHESTER & SHILDON SAVILLE (TRACTORS) LTD LONDON, STRATFORD ON-AVON, CARDIFF & BELFAST WESTERN CONTRACTORS SERVICES LTD BRISTOL

8 OUT OF 10 USERS CHOOSE

RAPIER

TRUCK MIXERS & AGITATORS



As more and more of Britain's busy sites switch to ready mixed concrete, it's RapieR truck mixers you'll see most of all. Because 8 out of 10 users now choose RapieR.

The reason is simple. Users everywhere have proved to their own full satisfaction that RapieR experience and know-how produce the rugged, high-output, low-overhead machines that exactly meet the needs of every mixing contractor. Write for details.

- * High discharge and horizontal from 2½-7 cubic yards
- * Controlled mixing—smooth discharge without segregation
- * Built for a long life of hard work

RANSOMES & RAPIER LTD . IPSWICH . ENGLAND

A Newton Chambers Company

RAPIER

WALKING DRAGLINES
EXCAVATORS
MOBILE CRANES
CONTRACTORS PLANT
WATER CONTROL
RAILWAY PLANT





From the very start use GOOD-WIN

GOOD-WIN

ACME



Larger 'ACME' stonecrushers include

More and more of the larger ACME rollerbearing stonecrushers are being installed as primary units where the material is suitable, resulting in greater outputs and lower bearing maintenance costs than ever before. 24x15 36x10

30x12 36x24

30×18 42×30



Goodwin Barsby & Co. Ltd. Leicester

"This 'DPA' Distributor type

Fuel Injection Pump

has many advantages"





It is so small and compact that it can be fitted snugly against the engine and makes a very neat installation. It lends itself to simple driving arrangements and can be mounted either horizontally or vertically. The position does not affect lubrication, because the pump runs in filtered fuel oil under a slight pressure and no special lubrication is needed. It is suitable for high speed work, because its rotating parts are light and there are no highly loaded springs. There is much more besides . . .

Over a quarter of a million already in use

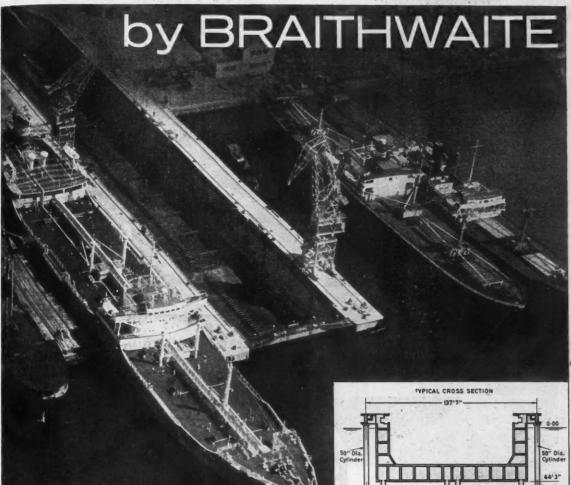


The World's Largest Manufacturers of

FUEL INJECTION EQUIPMENT

C.A.V. LIMITED, ACTON, LONDON, W.3

Foundation cylinders



160 Braithwaite planted cylinders support the seaward section of the dry dock at Trieste, Italy. The barge mounted Praithwaite pile borer used for the project is also illustrated.

General Contractor: Impresa Pietro Cidonio, Rome.



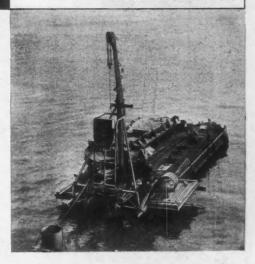
BRAITHWAITE FOUNDATIONS & CONSTRUCTION LIMITED

(Proprietors: Braithwaite & Co. Engineers Limited)

London Office:

DORLAND HOUSE · REGENT STREET · SWI

Telephone: WHItehall 3993 · Telegrams: Bromkirk Phone London · Telex 23320.



CHADBURNS

WE WILL GIVE YOU QUICK DELIVERY



ZEISS

SELF ADJUSTING LEVEL Ni2

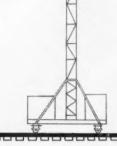
31, BRUNSWICK STREET, LIVERPOOL 2. Central 4844



WE HAVE PLEASURE IN NOTIFYING YOU OF OUR

TOWER CRANE TRACK DEPT.

STRAIGHT & CURVED



CALEDONIAN WORKS ALDRIDGE STAFFORDSHIRE ALDRIDGE 52966-7-8

ALL TYPES OF RAILS AND SLEEPERS IN STOCK

Victor COMPRESSED AN EQUIPMENT

Users of compressed air should

SEND FOR THIS

PUBLICATION

Here's a catalogue which should be on hand wherever compressed air is used.

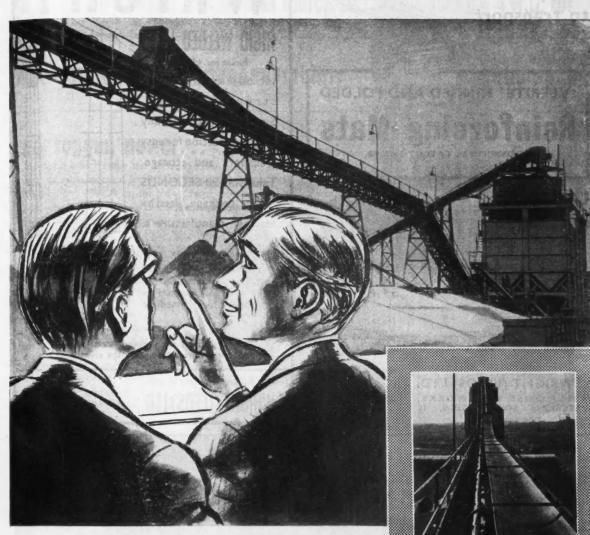
Fully detailing the correct procedures for installing Victor Aridifiers and Water Traps, giving complete information on Victor Air Hose Couplers and Self-Cleaning Air Filters, it's a mine of information of practical everyday use in office and workshop.

Write for your copy TODAY to:

Victor

VICTOR PRODUCTS (WALLSEND) LTD., WALLSEND-GN-TYNE, ENGLAND.
TELEPHONE: WALLSEND 68331 (6 LINES) TELEGRAMS: 'VICTOR WALLSEND'
CABLES: 'VICTOR WALLSEND ENGLAND'.

London Office: 1327 London Road, Norbury, S.W.16. Tel: Pollards 0077-84.



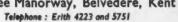
"I'm saving -yet increasing production by using



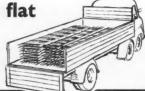
ctor ion ers, in

There are so many advantages to be gained by installing Maxim Conveyors. All parts standardized and interchangeable — easy erection — operate with minimum supervision — less down time for maintenance. You too can get MAXIMum production with minimum outlay for all types of belt conveyors and general material handling equipment. Extended credit terms enable delivery to be made upon payment of 10% deposit, the balance being paid over any period of up to three years. May we send you details? May we send you details?

MAXIM CONVEYORS (ENGLAND) LTD.
Crabtree Manorway, Belvedere, Kent



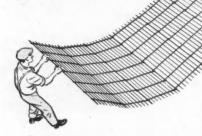
Compact and flat to transport



'VEERITE' HINGED AND FOLDED

Reinforcing Mats

Unfold flat in seconds



V. WRIGHT (LEEDS) LTD. STILLHOUSE WIREWORKS, WATERLOO ROAD, LEEDS, 10

Telephone: 76018/9

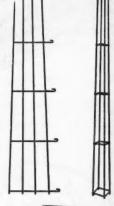
No costly handling! No awkward curling! VEERITE mats will speed up your jobs and save you money. All sizes. Send us your enquiry.

WRIGHT

RIGID WELDED MATS

Patent No. 15375/54 increase concrete post

strength by 20%. Supplied flat in any length or section for easy transport and storage. Take only 20 SECONDS to bend to shape. Used by leading manufacturers.



Split Concrete Snap-on Bar Spacers. Regd. Design. Patent applied for. Immediate delivery.



Used by the leading concrete manufacturers throughout the country.

Send for full particulars and samples.

WRIGHT (LEEDS) LTD., STILLHOUSE WIREWORKS, 10 Telephone 76018/9

Photograph by permission of

The Man all Man

Another drainage job well done

Over 60 miles of pipes used

on the London-Yorkshire Motorway



RAINB

concrete porous pipes



Full range of sizes available Large mature stocks Immediate delivery, any site Illustrated literature sent on request

RAINBOW INDUSTRIES LTD Pollington Goole Yorks SNAITH 312 (4 lines)



MANUEL-ROADLESS

4 W.D. for

high work/cost ratio, manoeuvrability

and speed,

Manoeuvrability make the ROADLESS 4 W.D. ANGLEDOZER a most valuable machine for Builders, Civil Engineers, Earth Moving Contractors, etc. Faster on the job... faster between jobs (the drive to the front wheels can be disengaged and the machine driven on the public highway,

saving the cost of a transporter)

Brief Specification:

POWER UNIT: Fordson Power Major engine developing 51.8 b.h.p.

OVERALL DIMENSIONS: Length 14ft. Width 7ft. Height, without cab 5ft. 6ins. with cab 7ft. 9ins.

WEIGHT: 4 tons 14cwt. 7lb.

BLADE: 7ft, wide \times 28ins, deep with renewable cutting edge. Maximum lift 2ft, above tyre level. Maximum dig 6ins, below tyre level. Angle 25 degrees to either side,

STANDARD EQUIPMENT: Lights, Front wheel weights, 9 × 24-4 ply front tyres, 11 × 36-6 ply rear tyres. Heavy duty clutch. Hand brake and Engine hour meter.





OFFICES



Built in

the TYPE 4

system of

Component Construction

Office expansion is a continuing problem for both small and large industrial companies especially when capital costs and completion dates are of first importance. The answer is TYPE 4—the new range of low cost timber buildings which are immediately available and capable of fast erection.

TYPE 4 have a structural module of 6 4" and buildings can be any number of modules in length and 2, 3 or 4 modules wide. The internal layout can be planned to meet individual requirements, walls can be placed off grid to permit a wide variety of room and corridor sizes. It is particularly suitable for Dormitories, Club Rooms and Pavilions.

TYPE 4 can be supplied completely transportable with 95% recoverability. Erection is simple and carried out with unskilled labour.

Write for Hiustrated Brochure, Besign Sheet and Price List

Drawing Office interior at

LITCHURCH GAS WORKS

for the

East Midlands Gas Board

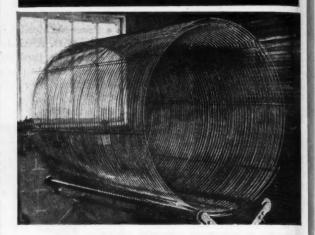


VIC HALLAM LTD

TIMBER BUILDINGS DIVISION LANGLEY MILL . NOTTINGHAM

Telephone Langley Mill 2301-7

HERE'S WHY Extramyte PIPES ARE TEN TIMES AS STRONG!



Double spiral reinforced steel and extra thick walls make Extramyte the strongest concrete sewer pipes ever built. In fact, they have been tested up to ten times British Standard loadings without failure.

Because of their great strength, Extramyte pipes do not require any site concrete. This means they can be laid more efficiently, more quickly with the minimum of supervision from the Resident Engineer or Clerk of Works, which results in considerable saving in time and labour. You are strongly advised to use the Ellis-Cornelius Flexible joints with these pipes

- *Tested to 10 times British Standard loadings
- * No site concrete needed
- *Far less supervision



Regd, Trada Wark

CONCRETE SEWER PIPES

SOLE AGENTS: JAMES SMITH BROTHERS

24, Half Moon Lane, London, S.E.24 Phone: Brizton 3000 and 3001 MADE BY JOHN ELLIS & BONS LTD.

21, New Walk, Leicester Phone: Leicester 55532 (7 lines)



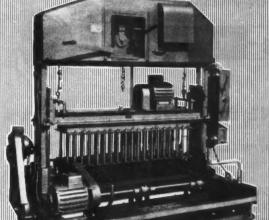
Wide range of low-priced plant for either DC or AC welding. All built to B.S. specifications and available with undergear for high-speed towing.

Range of capacities from 30-600 amps. (Illustrated) Model DA123, powered by Lister air-cooled diesel engine.

WELDING

WELDING INDUSTRIES

Manufacturers of Welding Plant, Blockmaking and Handling Machinery and Industrial Trucks



BLOCKMAKING EQUIPMENT

A range of machines to cover the manufacture, handling and storage of building blocks. Items in the Multibloc system include the blockmaking machine (illustrated), feed trucks, carrying and lifting trucks and a special grab/gantry.

Please ask for full details.

BLOCKMAKING

WELDING INDUSTRIES LTD

BLACKSWARTH RD., BRISTOL 5, ENGLAND Phone: 58408

Immense savings can be made by placing the entire responsibility of an installation project in the expert hands of TARSLAG Mobile Lifting Services who can supply specialists in every engineering field. Rotherham 3235 Wolverhampton 23881 Chesterfield 4908 Vou MAKE IT We INSTAL IT New Castle-on-Tyne 21377 London Viking 1719

INDUSTRIAL PROTECTIVE CLOTHING



Waterproof garments
of all types
RUBBER EOOTS
DONKEY JACKETS
APRONS, GLOVES, etc

As supplied to:
The National Coal Board,
Corporations,
Local Authorities,
Civil Engineering
Contractors and
Industrial Concerns
throughout the country.
Write for illustrated
leaflet.

BARRAS

RUBBER COMPANY LTD

Sandyford Road, Newcastle upon Tyne, I. Telephone: Newcastle 2-4438

C

and now either

TILLEY

PARAFFIN PRESSURE

lighting -- heating

or

PROPANE/BUTANE!

The choice is yours!

You have used TILLEY Paraffin pressure lamps and heaters for years. You do not need to be told of their efficiency and economy. Now you can obtain a similar range of lamps and heaters ALL operating on propane/butane. It's worth looking into.

CONSULT US FOR LIGHTING/HEATING

Write for illustrated leaflets to Dept. C.J.5

THE TILLEY LAMP COMPANY LIMITED, 70/72 JERMYN STREET, LONDON, S.W.1.



BT.25 10,000 M.R.C.P. Propane/Butane Floodlight.

If it's paraffin

FL.6 Floodlight 5,000 M.R.C.P.

Paraffin Pressure.

ESSO BLUE

CONTRACTORS' GUIDE TO AGGREGATES

REDFORDSHIRE

BEDFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD),
LTD., near Leicester. (Tel.; Coalville 1226/7/8; or
London: Norwood Hill 115) (For deta, see Leica,)
Robert Leicester. (Tel.; Tel., 261A Flinchtey
Rd., London, N.W.3. (Tel.; HAMpstead 8044/8,)
For all Ordon, N.W.3. (Tel.; HAMpstead 8044/8,)
For all Ordon, N.W.3. (Tel.; HAMpstead 8044/8,)
For all Ordon, N.W.3. (Tel.; Tel., Northampton
Robert Leicester, Rushden (2354/5). (See Northants,
Robert Leich, N. LTD., St. Neots,
Robert Leich, LTD., Northampton
Robert Leich, LTD., LTD., St. Neots,
IVES SAND AND GRAVEL CO.,
IVES AND AND GRAVEL CO.,
IVES CAMBRIDGE, 35
WEEG CAMBRIDGE, 35
WEEG CAMBRIDGE, 35
WEEG GRAVELS, LTD., Head Office: Goldington,
WEEG GRAVELS, LTD., Head Office: Goldington,
See Flatington Company (1998) (1998)
WEEG ROBERT LEICH, 1998)
WEEG ROBERT LEICH, 1998)
WEEG ROBERT LEICH, 1998
WEEG ROBERT LE

BERKSHIRE

d, 1s,

es,

nd

BERKSHIRE

MEY'S AGGREGATES. LTD., Lower Worston, Boars
Hill, Oxford, (T.cl.: Oxford 35x12—10 lines) Pils
Hill, Oxford, (T.cl.: Oxford 35x12—10 lines) Pils
gar Abingdon. (T.cl.: Sutton Courtenay, 275.)
Theale, near Reading, (Tel.: Theale 358.) Dorrchester,
Oxon. (T.cl.: Ciltton Hampden 235.) Billing,
Northampton (T.cl.: Coenhoe 464) for washed and
Northampton (T.cl.: Coenhoe 464) for washed and
BADDON HILL QU'ARRIES (ELLIS AND EVERARD),
LTD., near Leicester. (T.cl.: Coalville 1226/7/18; or
London Norwood Hill 115.) (For deta., see Leica.)
EUL 8RGds. S. AND L. LTD., L50A High Street,
COFF, HARRY A., LTD., Buckhurst Hill, Cheapside,
Ascot, Berks. (T.cl.: Ascot 1026/7.) Sand, all
grades of washed aggregates, hardcore, clinker, ashes
and holesin. D. SONG. LTD. Butty. Workey Conference

grades of washed aggregates, hardcore, clinker, asnes and hostin.

CURTIS, J., AND SONS, LTD., Botley Works, Oxford. (Tel. Oxford 41081/2/3.) Sand and all grades of washed aggregates. Pits at Radley, near Abingdon. (Tel. Abingdon 441.)

DANGERTELD, F. W. J. (Tel.: HAMpstend 8044/8.)

RA, London W. J. (Tel.: HAMpstend 8044/8.)

GRUNDON, S. (EWELME), LTD., Ewelme, Oxon, Crel.: Ewelme 20. London Office (Tel.: Uxbridge 4156.) All grades washed aggregates. Path hoggin, broken stone, building sand.

HAINES, H. (WITNEY), LTD., Oxford Road, Witney 42.) All grades washed aggregates, hardcore, pitching amd broken stone, Collider (Tel.: Witney 42.) All grades washed aggregates, hardcore, pitching amd broken stone, Collider (Tel.: Witney 42.) All grades washed aggregates, hardcore, pitching amd broken stone, Cotawold building and walling stone.

(Tel.: Witney 42.) All graces washing and hardone, pitching and broken stone, Cotswold build-ling and walling stone.

ANES AND CO., LTD., 2C Buckingham Avenue, South. Sand, aggregates, hardoore, ashes, buildozing stone.

South. Sand, aggregates, hardoore, ashes, buildozing south.

South. Sand, aggregates, hardoore, ashes, buildozing south.

Son Porchester Terrace North. Paddington, 5064.)

53A Porchester Terrace North. Paddington, W.2.

FOOLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.)

Burling of the Committee of the Commi

BRECKNOCKSHIRE

NABII ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor, (Tel.; Presteigne 352.) (See Herefordshire for details.) \$4LOP SAND AND GRAVEL SUPPLY CO., Admasson, Wellington Grd. 961), \$4lop.

BUCKINGHAMSHIRE

Admasion, Wellinston (Tel. 961), Salop.

BUCKINGHAMSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 lines) Hill, Oxford. (Tel.: Oxford 35421—10 lines) Hill, Oxford. (Tel.: Oxford 35421—10 lines) His alphy Sandford, near Abingdon. (Tel.: Sutton Courtenay, 275.) Thesie, near Reading, CTel.: Thesie, Salop Sal

Westhorpe Fit, Little Darkow, Bushall Marlow 379.)

BUART MACEY, LTD., Gordon Roa, High Wycombe.

STUART MACEY BLD., LTD., Head Office: Goldington, Bedford. (1c. 4587/8/9.) (See Bedfordshire.)

CAMBRIDGESHIRE

BARDON HILL QUARRIES (ELLIS AND EVERAED), LTD, near Leicester. (Tel.: Conivilie 1226/7/8; or London: Neticester. (Tel.: Conivilie 1226/7/8; or London: Neticester. (Tel.: Conivilie 1226/7/8; or DANGERFIELD, 7. 4 CO. Rd. London, N.W.3. (Tel.: HAMpstend 8044/8.) For all road aggregates, kerbs, satis. (See London.)

CAMBRIDGESHIRE

DARBY'S SAND AND GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 391/3, All grades of watshed sand and gravel, ready-mixed concrete. Pits: Mepal and Chippenham, Cambs.
DICKERSON, M., LTD., Teversham Corner, Newmarket Road, Cambridge, All grades washed sand "Terlite" crushed grantie, Flammed slag, concrete and brick hardcore, ready-mixed concrete—all grades. (Tel.: Cambridge: 68073/4.)
FRECKENHAM GRAVEL CO., LTD., The Brook, Sutton, Ely. (Tel.: Sutton 391/3.) Washed sand

CARDIGANSHIRE

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor. (Tel. Presteigne 352.) (See Herefordshire for details.) 8ALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel.: 961), Salop.

CHESHIRE

CHESHIRE

BUCKTON QUARRY, Broken stone, all grades. (Tel.: Mossley 123.) Or write Main Road. Oldham.

CASTLETON SAND AND GRAVEL QUARRIES, LTD., Pennan End Quarry, Whaley Bridge. (Tel. Whaley CAWOOD, WHARTON AND CO., LTD., Pistyll Gwn Quarry, Llanarmon, near Mold. Llanarmon-yn-lai 27.) Crushed limestuss and tarred macadam, all grades.

CHESHIRE AND NORTH WALES TARRED MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-lai 27.) Crushed limestuss and tarred MACADAM CO., LTD., Llanarmon, near Mold. (Tel.: Chestific Co., LTD., Llanarmon, near Mold. (Tel.: Llanarmon-yn-lai 27.) Crushed Limestuss and tarred Tel.: Llanarmon-yn-lai 27.) Crushed Limestuss and tarred Crei.: Llanarmon-yn-lai 28. (LTD., Linarmon-yn-lai 28. (LTD., Cheadle, Stoke-on-Trent, Staffs. (Tel.: Tean 393.) Maachenser Office: Blackfrians 3766/7. Plant capacity, 2,000 tons per Gay.

DUNNING AND SON, LTD. (See Shropshire.)
ELLESMERE SAND AND GRAVEL CO., LTD., Wood
Lane, Ellesmere, Salop. (Tel.: Ellesmere 167.) (For

Lanc Elemente. Salop. (Tel.: Elemente 167.) Gor Lanc Elemente. Salop. (Tel.: Elemente 167.) Gor HARPER AND THOMAS. LTD., Bayston Hill Quarry. Shrewbury. (See Shropshire for details.) HILTON GRAVEL LTD., Rice Street, Liverpool Road. Manchester. J. (Tel.: Deansgate 5455 and 5456.) Quarries at Cheadle. Staffs. (Tel. Fean 2d.) 2196.) HULLAND GRAVEL CO., LTD., Cheadle. Stoke-on-Trent. (Tel.: Cheadle 2323)4. 2119 and 2195.) Manchester Office: Hardy's Buildings. 3 cateaton Street. Marchester. J. (Tel.: Blackfriary 22778.) PENMAENNAWR AND TOTAL STAFF, Control of the Tel.: Show of the Staff of the Staff of the Staff of the Staff 7261.) All sizes and gradings of crushed grante aggregate from our Collingwood Dock (Liverpool) Depot. Any quantity per day; Immediate delivery ex stock.

Depot. Any quantity per day; immediate delivery ex stock.

TERN HILL SAND AND GRAVEL CO., LTD., and the local stock of the loca

CORNWALL

PENTEWAN DOCK AND CONCERTE CO. LTD.
Pentewas Works near St. Austell. (Tel.: Mevaginery
silica gravel and grit, concreting, building, plastering
and asphalting sands, sivas and grante sagregates,
all sizes.

CUMBERLAND

BROOMBYS, LTD., Sandside, Milnthorpe (Tel.; 3251/2), Westmorland. (See Westmorland.)

ESK MANUFACTURING CO., LTD., Dalston Road, Carlisle, Cumberland. (Tel.; Carlisle 2-4941.) All grades washed, crushed gravel and concreting sand to B.S. Specification. Precast concrete products and partition blocks. Sand lime coloured facing and common bricks. Ex works or dailvered.

DENBIGHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel.: 961), Salop.

DERBYSHIRE

BALLIDON QUARRES, LTD., Ballidon, near Ashbourne, Derbyshire. '(Fel.: Perwich 201 and 202.) Clean and graded dry limestone to B.S. S., all sizes, coated limestone to B.S. 802 and 1821 and watemix; large output; reliable deliveries.

BURROWS BROTHERS (EXCAVATIONS), LTD., Mar've Place Chambers, West Bars, Chesterfield, and the state of the sta

DERBYSHIRE

HULLAND GRAVEL CO., LTD., Cheadle, Stoke-on-Trent. (Tel.: Cheadle 2323/4, 2119 and 1219-Manchester Officer Hardy's Buildings, 3 Cateston Street. Manchester. 3. (Tel.: Blackfrårs 2277/8.) **ALISBURY AND WOOD, LTD., Mattock. (Tel. 272/273.) Limestone and granite, dry or costed structed and mesural Russy lime and ground limestone. Lightweight aggregates, ashes, red shale.

DEVONSHIRE

PLYMPTON TRADING CO., LTD., Marth Mills. Plympton, Plymouth, (Tel.; Plympton 2361.) Washed and graded sands for all purposes. Special sands to B.S.S. Procest communic.

DORSET

DORSET

BULL BROS., S. AND L., LTD., 126A Bigh Strest.
Winchester. (Tel.: 2264.) (See Hampshire.)
DANGERFED. F. AND CO., LTD., 261A Finchisty
DANGERFED. F. AND CO., LTD., 261A Finchisty
For all road assressies, kerbs. setts. (See London.)
For all road assressies, kerbs. setts. (See London.)
DORSET LIMESTONES, LTD., Bumpers Lane, Essresa,
Portland, Dorset Crel: Fortland 2207/8.) Tarreé
and bituminous macadam, foundation materials,
Ilmestone for sil purposes and to all gradings.
Portland scone sagregates and Portland capatons
and to all gradings.
Fortland scone sagregates and Portland capatons
(Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., I Commercial Road, Parkstone.
(Tel.: S379.)
WOREYS (VERWOOD), LTD., Verwood, Wimborns,
DORSET, (Tel.: Verwood, 234.)
Concrete sagregates
building tand, bossen, such grades

DURHAM

BRATTHWATTE A. AND CO.

BRAITHWAITE, A., AND CO., LTD., Knaresborough, Yorks, Quarry at Catterick. (Tel.: Old Cast. 157.) (For details see Yorkshire.) ESSEX

London: Norwood Hill 115.) (For dets., see Leies.)

BENT-MARSHALL. (LEYYDN), LTD., 655-697 Highs

Road, Leyton, E.10. (Tel.: Leytonatone 4047/8.)

Sand, Dullast, brick and constrets hardcore delivered by the control of the control

GLOUCESTERSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars
Hill, Oxford. (Tel.: Oxford 35421—10 lines) Pits
at Dry Sandford, near Abingdon, Sutton Courtemay,
near Abingdon. (Tel.: Sutton Courtemay 275.)
Droth, Board Courtemay,
Northampton (Tel.: Oxford 364.)
Northampton (Tel.: Oxford 364.)
Regarded aggregates to B.S.S.
BENGRY AND SONS, LTD., Longmoor, Kingslame
Leominater, Recelerchiler. (Tel.: Kingslamd 51/17, 1676.)
Lower of the Courteman Courtemay,
Leominater, Recelerchiler. (Tel.: Kingslamd 17/1/4874.)
Sand, graded gravel aggregates hardcore, limestone,
chippings, tarred and bituminous limestone, sunsates
blocks, fence posts, etc. etc.
CROMHALL QUARRIES, Cromball, Wotton
signersates, pre-graded in large quantities. Tarnasadam, tarpaving, bituminous macadam and colasphalt to B.S.S. for Band or machine laying.
GRIFFITHS, A., AND SONS, Churchdown, Clouceste
Pit, quarry and dredger owners. All grades grave
aggregate materials. (Tel.; Churchdown, Clouceste
Pit, quarry and dredger owners. All grades graves.

GUIDE TO AGGREGATES CONTRACTORS'

GLOUCESTERSHIRE

HALL AND CO., LTD., Longmoor House, Ashton Vale
Road, Bristol, 3. (Tel.: 63001.) Gravel augmenters
Concreting. playsering and building sand.
FOOLE (LECTHLADE), LTD., Gravel Pf. Burford Road,
FOOLE (LECTHLADE), LTD., Gravel Pf. Burford Road,
FAYMAC, LTD., Wootton Bassett, Swindon. (Tel.:
Wootton Bassett 391—5 lines.) (See Wiltshire.)
WHITECLIFF QUARRIES AND BRICKWORKS, LTD.,
Coleford, Glos. (Tel.: Coleford 3158/9.) Tarred and
bituminous limestone macadams, asphalt, concrete
aggregates, dolomitic media, engineering, facing ana,
common bricks for all purposes. Delivery road or rail
HAMPSHIRE

HAMPSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hammer's AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford, Crie. Oxford 3521—10 lines) Pits Hill, Oxford, Crie. Oxford 3521—10 lines) Pits Hill, Oxford, Crie. Theale 358.) Dorchester, Oxon, Crel.: Citron Hampden 235.) Billing, Northampton (Tel.: Concahoe 464) for washed and Sarpon Hill. Over 10 lines Pits Northampton (Tel.: Concahoe 464) for washed and BARDON HILL OVERRES (ELLIS AND EVERARD), LTD., mear Leicester, Crel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For deta, see Leica, BULL BROS., S. AND L. LTD., 126A High Street, William (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Marine Parade, Hall AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL AND CO., LTD., Balle What (Tel.: Stratton-on-the-Fosse 243.)
HALL STRATTON CO., LTD., Verwood, Wilmborne. Dorset. (Tel.: V

Dorset, (I.e.: Verwood 23-4.) Concrete aggregates, building sand, hoggin, path gravel.

NEW MILTON SAND AND BALLAST CO., Lymington Road, New Milton, Hants. (Tel.: 37 and 566.)

Guaranteed uncrushed, washed, screened and graded concrete aggregates. All sizes. Washed sharp and

fine sands.

PRIVETT. W. G., AND SONS, LTD., Drayton Lane,
Portsmouth. (Tel.: Cosham 70059.) Concrete aggregates. building sand, hoggin, ashes, washed and

rorumouth Ctel.: Cosham 70059.) Concrete aggregates, building and, hosgin, ashes, washed and EALPH OF BASINGSTOKE, LTD., 37 Kempshot Lane, Basingstoke, Hants. (Tel. 85.) Concrete aggregates, building sand, path gravel, hosgin, etc.
WRAYSBURY SAND AND GRAVEL CO., LTD., Station Rd. Theale, Reading, Berks, (Tel.: Theale 373.)
WESSEX SAND AND GRAVEL CO., 126 Hillside Ave., Southampton. (Tel.: 5616.) Fits at Romey and Fair Oak. Concrete aggregates, hosgin, building sand, etc.

HEREFORDSHIRE

HEREFORDSHIRF

SENGRY AND SONS, LTD., Longmoor, Kingsland,
Leominster, Herefordshire. (Tel.: Kingsland 301/4.)
Suppliers of all grades of crushed concrete asgregates,
road metalling, pitching stone, hardcore and coasted
DINMORE GRAVEL AND STONE CO., LTD., 5A King
Street, Hereford. (Tel.: Hereford 5523.) Suppliers
of all grades of concrete aggregates, sand, pitching
stone and hardcore.
HARPER AND THOMAS, LTD., Bayston Hill Quarry.
Shrewbury. (See Shropshire for details.)
NASH ECOLES, STONE, 1998.
NASH ECOLES, STONE, 1998.
STONE, STONE, 1998.
STONE, STONE, 1998.
THOMAS, LTD., Bayston Hill Quarry.
OLD FADNOR TRADING CO., LTD., Kington,
CITC., 11.) Granite and limestone aggregates, coated
macadem, concrete produce.

(Tel. 11.) Grante and limestors aggregates, conted macadam, concrete products.

8ALDF SAND AND GRAVEL SUPPLY CO., Admaton, Wellington (Tel. 961), Salon.

WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Colerof, Glos. (Tel. 3158/9.) (See Gloucestershire.) HERTFORDSHIRE

HERTFORDSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD),
LTD., near Leicester. (Tel.: Coalville 1226/7/8; or
London: Norwood Hill 115.) (For dets., see Leica.)
BANGERFIELD, F. J., AND CO., LTB., 261A Finchley
Road, London, N.W.3. (Tel.: HAMpstead 8044/8.)
For all read segregates, Rerbs, setts. (See London.)
8.5 TWOODE SALES, LTD., Essiwood House, City
B. (Tel.: Hoddendon 2455.) Producers and
distributions of all grades of washed aggregates.
GABRIEL C., LTD., Palmers Lane, Enfield, Middx.
(Tel.: HOWard 4351/2/3.) Washed aggregates and
building sand. Pits at Hertford and Enfield. Middx.
(Tel.: HOWard 4351/2/3.) Washed aggregates and
building sand. Pits at Hertford and Enfield. Middx.
(Tel.: HOWard 4351/2/3.) Washed aggregates and
building sand. Pits at Hertford and Enfield. Gravel
ALL AND CO., LTD., Railway Yard, Orchard Road,
Sievenase (Tel.: 775), and at Hatfield. Gravel
Sievenase (Tel.: 775), and at Hatfield. Gravel
Fit (Tel.: Bark) (Tel.: St. Ivee 2441/2/3/4.)
(See Huntingdonshire for details.)
WEBB, G., CAMBRIDGE, 35 Magrath Avenue,
WEBB, G., CAMBRIDGE, 35 Magrath Avenue,
HUNTINGDONSHIRE

HUNTINGDONSHIRE

HUNTINGDONSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD),
LTD., MAN Leicester. (Tel.: Coniville 1226/7/8; or
LTD., MAN Leicester. (Tel.: Coniville 1226/7/8; or
DANNING CONTROL (Tel.) (For dets., see Leics.)
BANNING CONTROL (Tel.) (For dets., see Leics.)
BANNING CONTROL (Tel.) (For dets., see Leics.)
BANNING CONTROL (Tel.) (For dets., see Leics.)
For all road aggregates, kerbs, seets. (See London.)
FERRERSAND AGGREGATES, LTD., Northampton
Road Quarries, Rushden (2354/5). (See Northants.)
GRAVEL PRODUCTS (HUNTS.), LTD., 5. Neons,
Hunts. (Tel.) St. Neons 123.) Pits at Little Paxton,
the product (Tel.) (Tel

description.
WEBS, G., CAMBRIDGE, 35 Magrath Aven
Cambridge, (Tel. 1969/4353.) (See Cambridgeshir
WELFORD GRAVELS, LTD., Head Office: Goldingto
Bedford. (Tel. 4587/8/9.) (See Bedfordshire.)

KENT

BEASTED SAND PITS, Brasted, Kent (Tel. 586.)
Loudon office: 10A Ellery Street, S.E.15. (Tel.: New Cross 3337.) Soft and plastering sands, lime and sand-mix stry, hardcore, S.H. bricks, sable etc. 5. (STITINGBOURNE), LTD., Chalkwell of the control of the control

E.C.A. (Tel.: City 7001—10 liness salley, London, BIAMOND TREAD CO. (CHART), LTD., Swan Lane Quarries, Little Chart, Ashford, Kent. Quarry-cowners; tarmacdam, bitumbinus macadam and crycoadstone suppliers. All inquiries to Area Office. Ditton Court Quarry, Larkheld, near Maidatone, Kent. (Tel.: W. Mailling 3444.)
HALL AND CO., LTD., Canning Street, Maidatone (Tel.: Maidatone 51051), and at Folkestone and Hayes. Pits at Lunsford, near Larkheld. Gravel asgregates, concreting, plastering and building sand. Succeete precision-mixed concrete.

aggregates, concreting, plastering and building sand.
Surecrete precision-nized concrete.

HARRIS, M. P., AND CO., LTD., Station Road,
Paddock Wood, Kent (Tel 385.) (See Sussex.)

TILBURY CONTRACTING AND DREDGING CO.,
LTD., Postley, Maidstone. (Tel.; Maidstone,
53401/2/3.) Suppliers of tarred, bituminous and dry
Kentish ragstone, sea walling, asphalt fillers, Scotch
grantic and Kerbing.

LANCASHIRE

LANCASHIRE

BROOMBYS. LTD., Sandaide. Milinthorpe (Tel. 3251/2),
BU Westmorland. (See Westmorland.) all grades. (Tel.:
Mosaley 123.) Or write Main Road, Oldham.
CASTLETON SAND AND GRAVEL QUARRIES, LTD.,
Trows Lane, Castleton, nr. Rocholale. (Tel.: Castleton 57100.) Lee Quarries, Bacup (Tel.: Bacup 287.)
Washed pit sand, crushed washed stone aggregates; pitching stone.
CROFT GRANITE BRICK AND CONCRETE CO.,
"Kubitzed" sranic aggregate 18 8.3. 2656.
"Kubitzed" sranic aggregate 18 8.3. 2656.
and bituminous macadam, cold asphalt. "Croftmatte" Wet Mix, filter media, concrete products.
CROXDEN GRAVEL, LTD., Cheadle, Stoke-on-Trent, Staffs. (Tel.: Tean 393.) Mancheter Office:
Blackfriars 3766/7. Plant capacity, 2,000 tone per day.

Bilackfriams 3766/7. Plant capacity, 2,000 tons per day
DUNNING AND SON, LTD. (See Shopshire.)
HARTLEY, JOHN W., LTD., Lundsfield Quarry, Cerrforth, Lancs, (Tel.: Carnforth 100.) Large producers of highest quality washed sands, clean washed natural pebble and crushed gravel aggregates for all constructional purposes. Rice Street, Liverpool Road, All Charter and Constructional purposes. Rice Street, Liverpool Road, Charter and Charter and Charter and Charter and Charter and Charter and Street, Liverpool Road, all Longton, Stoke-on-Trent, (Tel.: Longton 32196.)
HULLAND GRAVEL CO., LTD. Chendle, Stoke-onTrent. (Tel.: Chendle 2323/4, 2119 and 2195.)
Manchester Office: Hardy's Buildings, 3 Cateaton Street, Manchester, 3. (Tel.: Blackfriars 2277/8.)
PENMAENMAWR AND WELSH GRANITE CO., LTD.,

Street, Manchester, 3. (Tel.: Blackfriars 2277:6.
PENMARMAWA AND WELSH GRANITE CO., LTD., all sizes and gradings of crushed granite aggregate. Immediate delivery ex stock.
Liverpool and Preston Depots:
Office: 7 Picton Road, Liverpool, 15.
(Tel.: Sefton Park 7261.)
Manchester Depot:
Office: Cornbrook Road, Manchester, 15.
ROUTO. Traifford Park 3830.
ROUTO. (Tel.: 35451.—4 lines.) Building and concrete sand and shale.

ROUND-O COLORDO (CE): 35451—4 lines.) Building and constant on (Tel.: 35451—4 lines.) Building and constant on the constant of the constant of

LFORD GRAVELS, LTD., Head Office: Goldington Bedford. (Tel.: 4587/8/9.) Local Office and pita

Bedford. (Tel.: 4587/8/9.) Local Office and pite. Chorley 3923.
WITHERS LIMESTONE, LTD., Black Lane Quarry, Carnforth, (Tel.: Carnforth 327.) Graded ilmestone aggregate to B.S.S., all sizes. Immediate delivery Cartforth. (Tel.: Capham, via Lancaster. (Tel.: Clapham, via Lancaster. (Tel.: Clapham, 318/9.) Worke Tel.: Ingleton 221. All sizes and gradings of ingleton grantle aggregate.

LEICESTERSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicester. (Tel.: Coalville 1226/7/8; or London Office—Norwood Hill 115.) Best Leicester-shire grey granite, dry and coated gradings to any specification, cold asphalt and wet mix. Prompt

specification, cold asphalt and wet mix. Prompt to nod/rail delivery.

BRUNTINGTHORPE GRAVELS, LTD., Gilmorton, near Rupby, (Tel.: Lutterworth 46.) All sizes gravel aggregate, building and concrete sand to B.S.s. scientifically balanced ballsst. [ThD., Markfalled near Action of the concrete sand to B.S.s. All sizes. State of the concrete sand to B.S.s. All sizes. Tareed and butterious granite, concrete slabs and kerbs. Transit-mixed concrete.

grante, concrete these concrete Co.
CROFT GRANITE, BRICK AND CONCRETE CO.
LID., Croft, near Leicester, Clei: Narborough 2261
—4 lines.) "Kublitzed" granite aggregate to B.S.s.
tarred and bleuminous macadam, cold asphalt

"Crofumatie" Wei Mix. Blier media, concrete
"Crofumatie" Wei Mix. Blier media, concrete
DU Products.

DU Products.

DU Products.

DU Read State State

LEICESTERSHIRE

WANLIP GRAVELS, LTD., Wanlip Road, Byrner Leticester. Any size or gradings, scientifically balanced ballast. All to B.5.8. (Tel.: String 2327 and 2797.)
WELFORD GRAVELS, LTD., Head Office; Goldinston, Bedford. (Tel.: 4587/8/9.) (See Northamptonshirs)
WREAKE VALLEY GRAVELS CO., LTD., Melton Moltonay. (Tel.: Pits—Rotherby 205 or head office Melton 2488.) All grandes washed aggregates and sand.

LINCOLNSHIRE

BULLIMORES SAND AND GRAVEL, LTD., South Witham, Grantham. (Tel.: Thistieton 223.) Building and, hardcore ashes. All grades washes and aggregates.

BURROWS BROTHERS (EXCAVATIONS), LTD. Market Place Chambers, West Bars, Chesterfald (Tel. 7130.) (For details, sare Derbyshire.)

CONINGSBY SUPPLY CO., LTD., Registered Office The Broadway, Woodhall Sps. Lines. (Tel.: Woodhall Sps. Lines.)

hail Son 3150.) Screened limestone, hardcore, pitching, filling, filint, hoggin. Ex-quarries or delivered DOW-MAC (PRODUCTS), LTD., Tallington, Stamford, All grades ef washed sand and gravel. Grid. Market Deeping 2301.) EAST MIDLANDS BUILDERS SUPPLY CO., 21 Castledyke West, Barton-on-Humber, Lines. (Tel. 2189) All grades washed sand and gravel, roadstoss, All grades washed sand and gravel, roadstoss, Gibbions, F. B., AND SONS, LTD., Registered Office, Weby House, Market Deeping 1321/2383.) Pits at Langton, CTcl.: Market Deeping 2180, All grades washed sand and aggregates.

HARTSHOLME GRAVEL AND SAND CO., LTD, Hartsholme Wood, Doddington Road, Lincoln. Sole selling agents: Hartsholme Sless, Lid., 17 Wes HOVERINGHAM. GRAVEL Co., 18 Hoverlaghes, Co., 18 Co.,

and broken zone. (See also Northamptonships)
POLLARD, C., AND SON (TALLINGTON), LTD.
Walk House, Langtoft, Peterborough, Pits at
Tallington, near Stumford, Lincs, Cfel: Marke
Depping 2140.) All grades washed sand as
aggregates. For Supercrete" ready mixed concess;
'phone Market Decylics 1132
TRENTFORD GRAVELS, LTD., Head Office: Deansgron,
Grimsby, (Tel: Grimsby 5354.) Washed and grade
gravel and sand, roadstone, hardcore, stag, tarms;
ashes, etc. Pits and quarries throughout the county.

LONDON

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Leicoster. (Tel.; Coalville 1226/7/8; w London: Norwood Hill 115.) (For dets., see Leica) COX, H., AND SUNS, LTD., 33 Southampton Way,

LTD., near Leicoster. (Tel.: Coalville 1226/7/8; we London: Norwood Hill 115.)
COX, H., AND SONS, LTD.,
33 Southampton Way,
Camberwell, S.E.S.,
COX, H., AND SONS, LTD.,
34 Southampton Way,
Camberwell, S.E.S.,
CROFT. (GRANTEZ BRICK AND CONCRETE CO.,
LTD., 128-136 High Street, Edgware, Middleser,
Glei: Edgware O076/7 and 1246.)
"Kubitzed"
granite aggregate to B.S.S., tarred and bituminous miscadam. cold asphalt. "Croftmattle" Wet Mil.
DANGERFIELD. F. S. AND CO., LTD., 261A Finchip Road, N.W.3, GTel: HAMptead 8044-8.)
Granite kerb and setts, felspar quartz and other minerals by road or rail, or ex-London stock.
DORSET LIMESTONES, LTD., Bumpers Lane, Estica, Concrete Limestones, Concrete Con

MERIONETHSHIRE

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel. 961), Salop.

MIDDLESEX

CROSS, GEO. C., AND CO., LTD., Ironbridge Uxbridge Road, Southall. (Tel.: Southall 2264/5/6.) Sand. balast, shingle, hardcore, ashm.

2264/5/6.) Sand. balast, shingle, hardcore, seement of the process of the process

sand.
I.ONDON BALLAST CO., LTD. (Tel.: Paddington 5064)
55A Porchester Terrace North, Paddington, W.2.
STUART MACEY, LTD., Gordon Road, High Wycombe
(Tel.: High Wycombe 2591/2.)

THAMES SAND AND GRAVEL CO., LTD., Fordbridge Road, Shepperton. (Tel.: Walton-on-Thames 236)6. Gravel aggregates, concreting, plastering and building

eand.

WRAYSBURY SAND AND GRAVEL CO., LTD. Pin

BY Wraysbury. (Tel.: Wraysbury 164.) Grave

sagregates, concreting, plastering and building sand

60

5

ford.

GUIDE TO AGGREGATES CONTRACTORS'

MID-WALES

MID-WALES

ENGRY AND SONS, LTD., Lossmoor, Kinssland, 1 cominster, Herefordshire, Tel.; Kinssland 301/4.)

Fl. Engress and L. Cominster, Learner Condition, Cominster, Herefordshire, Cit.; Kinssland 301/4.)

Fl. Engress AND AND GRAVEL CO., LTD., Wood Line, Ellesmere, Solo, Tel.; Ellesmere 167.) (For details, see Shronshire.)

HARFER AND THOMAS TELD., Bayston Billi Quarty, Chewchury Strong, Cominster, Comi

MONMOUTHSHIRE

IN-SITU CONCRETE, L.I.D., Victoria Works, Ehhw Vale 11cl 3032) and Phoenia Works, Cardiff (Rhiwbina 2360) for limestone and slag asgregates, ready-mixed concrete, tarmacadam, media, Billing, etc., kerbs and

concrete, International, and a payings, and payings, and

the county. WHITECLIFF QUARRIES AND BRICKWORKS, LTD., Coleford, Gios. (Tel. 3158/9.) (See Gloucestershire.) MONTGOMERYSHIRE

HARPER AND THOMAS, LTD., Bayston Hill Quarry.

Shrewbury. (See Shropshire for details.)

NAH ROCKS STONE AND LIME CO., LTD.,

Presteigne, Radnor. (Tel.; Presteigne 352.) (See Herefordshire for details.)

\$ALOP SAND AND GRAVEL SUPPLY CO.,

Admarton. Wellington Tell 9A1). Salop

NORFOLK

AUGRFULE

RARDUN HILL QUARRIES (ELIS AND EVERARD),
LTD., near Leicester. (Tel.: Coalville 1226/7/8; or
London: Norwood Hill 115.) (For deta., see Leica.)
PRECKENHAM GRAVEL CO., LTD., The Brook.
Sutton. Ely. Cambs. (Tel.: Sutton 391/3.) Washed
sand and gravel. Pit: Feliwell.
JOHNSON. P. C. H., LTD., Station. Road, Terrination
S. Clement 248.) Washed and screened gravel
roadstone, washed sharp and the sands.
HORFE GRAVEL PITS, LTD., Harvey Lane, Norwich
(Tel.: Norwich 332434.) Washed and graded aggregater, stone and gravel delivered to all parts of
Norlotk and Sutfolk.

NORTHAMPTONSHIRE

NORTHAMPTONSHIRE

AMEY'S AGGREGATES, LTD. Lower Wootton, Boars
Hill Orford Tct. Oxford 3521—10 lines) Pits
Dry Sandford, near Abingdon, Sutton Courtenay,
near Abingdon, Tct.; Sutton Courtenay 275.)
Theale, near Reading, Tct.; Theale 388.) Dorchester,
Oxon, Tct.; Citton Hampden 236.) Billing,
Northampton Tct.; Cogenhoe 4841 for washed and
graded agregates to B.S. ELIS AND EVERARD,
HILL clicoster. (Tct.; Coalville 1226/7/18; or
London; Norwood Hill 115.) (For deta, see Leica.)
BICESTER STONE CO., LTD., Stratton Audley,
Biccater, Oxon. Tct.; Stratton Audley 238.) Manufacturers and suppliers of all grades ilmestone
turmscadam, dry, pitching stone, hardcore, set.
BILLING GRAVEL CO., LTD., Staton Road, Billing,
Northampton, Tct.; Cogenhoe 210, Road,
Northampton, Tct.; Cogenhoe 314, and 3345.)
BRAYBROOK, E. W., LTD., Newton Road, Higham
Ferrers, Northants, Tct.; Rushen 334 and 3345.)
All grades of washed and graded sagregates to
B.S.S. Building and, hardcore.
Company of the company of t

Northamotonishire.
FERRERSAND AGGREGATES, LTD., Northampton
Road Quarries, Rushden, Northants. (Tel.: Rushden
2354/5) Largest producers in the county of all
grades of high-quality concrete aggregate to B.5.Deliveries throughout Northamptonshire and adjoining

Deliveries throughout Pottimingson.

GIBBINS, F. B., AND SONS, LTD., Welby House, Market Deeping, Peterborough, (Tel. Market Deeping 3321/2383.) (See Lincolnshire for details.) HOVERINCHAM GRAVEL CO., Hoveringham. Nottingham. (Tel.: Lowdham 3171—15 lines.) (For details, see Nottinghamshire.)

KETTON STONE CO., (Prop. Andrew's Garage), Ketton, oear Siamford. (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica class.

KETTON STONE CO. (Prop. Andrew's Garage), Ketton, ear Stamford, (Tel.: Ketton 206.) Hardcore, roudstone, crushed stone, top soil, stilles else, viewed at the control of th

NORTH WALES

AWOOD, WHARTON AND CO., LTD., Pistyll Gwyn Quarry, Llanarmon, near Mold. (Tel.: Lianarmon-yn-lai 27.) Crushed limestone and tarred macadam. all grades.

NORTH WALES

CHESHIBE AND NORTH WALES TABRED MACADAM CO. (Tel.: Linnarmon-yn-YTD. Linnarmon, near Mais, stone, dry and coated to B. 35 d, broken limitione, dry and coated to B. Registered Office — Market Chambers Tunstall. Stoke-on-Trent. (Tel.: Stoke-on-Square. Tunstall. Stoke-on-Trent. (Tel.: Stoke-on-Square.

Square. Tunstall, Store-on-trem. Uni: Store-on-trem. Their spikeling and the store of the store

Lianrews, Denbigabrier, Clei.: Llaurews 32, 200 Constitution of the Constitution of th

NOTTINGHAMSHIRE

NOTTINGHAMSHIRE

BARDON HILL QUARRIES (ELLIS AND EVERARD),
LTD., near Leicester. Tel.: Coalville 1226/7/8; or
London: Norwood Hill 115.) (For details, see Leiox.)

BUBROWS BROTHERS (EXCAVATIONS), LTD.,
GERN QUARRIEF, LTD., Central Chambers, Wellgate,
Kotherham. (Tel.: Rotherham 5223.) Crushed and
graded stone, concreting sand, building sand,
ex-quarry or delivered gravel; could be collected
cx-quarry or delivered gravel; could be collected
cx-quarry or delivered.
GUNTHORPE GRAVELS (1988), LTD. (Tel.: Nottingnam 77357; and Works: Lowdham 2131.) (An
associate company c' T. C. Campbell, Ltd.) All
grades washed gravel and sand to B.S.S.
HONGON CONTROL (1988), Ltd. (1988), Ltd.
OVALOR (1988), Ltd. (1988), Ltd. (1988), Ltd.
OVALOR (1988), Ltd. (1988), Ltd. (1988), Ltd. (1988), Ltd.
OVALOR (1988), Ltd. (1

OXFORDSHIRE

OXFORDSHIRE

AMEY'S AGGREGATES, LTD., Lower Wootton, Boars Hill, Oxford. (Tel.: Oxford 35421—10 linea) Pits at Dry Sandford, near Abingdon, Sutton Courtenay 275. Oxford 35421—10 linea) Pits at Dry Sandford, near Abingdon, Sutton Courtenay 275. Oxford Con., (Tel.: Cilfton Hampden 236.) Billing, Northampton (Tel.: Cogenhoe 264) for washed and staded sastregams in B.S.S.

BARDON HILL QUARRIES (ELLIS AND EVERARD), LTD., near Lelcester. (Tel.: Coalville 1226/7/8; or London: Norwood Hill 115.) (For dets., see Lelcs.)

BENER AND SONS, LTD., Longmoor, Kingsland, London: Norwood Hill 115.) (For dets., see Lelcs.)

BENER AND SONS, LTD., Longmoor, Kingsland, London: Norwood Hill 115.) (For dets., see Lelcs.)

BICESTER STONE CO., LTD., Stratton Audley, Bicester, Oxon. (Tel.: Stratton Audley 238.) Manufacturers and suppliers at all grades limeatone target and suppliers at all grades and season of the complex of the compl

hardcore, pitching and broken stone, Cotswold build-ing and walling stone.

WRAYSBURY SAND AND GRAVEL CO., LTD., Station Rd., Theale, Reading, Berks. (Tel.: Theale 373.)

RADNORSHIRE

BENGRY AND SONS, LTD., Longmoor, Kingsland, Leominster, Herefordshire. (Tel.; Kingsland 301/4.) (See details under Herefordshire.)

NASH ROCKS STONE AND LIME CO., LTD., Presteine, Radnor. (Tel.; Presteine 352.) (See Herefordshire for details.)

OLD RADNOR TRADING CO., LTD., Quarries in Radnorshire. (Tel.; Kington 11.) (See Herefordshire.)

SALOP SAND AND GRAVEL SUPPLY CO., Admaston, Wellington (Tel. 961), Salop.

RUTLAND

BULLIMORES SAND AND GRAVEL, LTD., South Witham, Grantham, Lanc. (Tel.: Thistleton 223.) Building sand, hardcore, ashes. All grades washed and augregates.

GIBBONS, F. B., AND SONS, LTD., Welby House, Market Deeping, Peterborough. (Tel.: Market Deeping 3321/2383.) (See Lincolanshire for details.)

HOVERINGHAM GRAVEL CO., Hoverinsham. Nottingham. (Tel.: Lowdham 3171—15 lines.)

KETTON STONE CO. (Prop.: Andrew's Garage), Ketton, nr. Stanford (Tel.: Ketton 206.) Hardcore, roadstone, crushed stone, top soil, silica clay. Ouarrice at Ketton.

rondstone, crushed stone, top soil, silica clay, Quarries at Ketton, PETERBOROUGH QUARRIES, LTD., Sundylands, Maxey, Peterborough, (Tel.: Market Deepins 235— 3 lanes.) Quarry at Greetham, sil grades of broken stone and hardcore. (See siso Northamptonashire.)

RUTLAND

POLLARD, C., AND SON (TALLINGTON), LTD., Walk House, Langtoft, Peterborough. (Tel.: Marrant Deeping 2140.) (See Lincolmahire for details.)

SCOTLAND

KEIR AND CAWDER, LTD., Kirkintilloch Road, Bishopbriggs. (Tel.: Pishopbriggs 3200.) All grades washed sand and gravel aggregates.

SHROPSHIRE

SHROPSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Annbourne, Derbyshire. Ticl.: Parwich 201 and 202., reasted timestone to B.S. 1823 and 1823 and well-marked and the second second dimestone to B.S. 1823 and 1823 and well-marked and the second second dimestone to B.S. 1823 and 1823 and well-marked and the second se

(Tel.: Stration-on-the-Fosse 243.)
HALL AND CO., LTD, Longmoor House, Ashton Valle Road, Bristol. 3. (Tel. 63001.) Gravel Regragates, concreting, plastering and building sand.

BOADS RECONSTRUCTION (1934), LTD., Stoneleigh House, Frome. (Tel.: Frome. 2361.) All sizes broken timestone, dry and coated, to British Standards. Precast concrete products.

WAINWRIGHT, 2018N, AND CO. 217.) All sizes broken coated baseling control by the coated baseline concrete aggregates. Filter-media, building blocks and slabs.

SOUTH SCOTLAND

ESK MANUFACTURING CO., LTD., Cartisle. (Tel. Carlisle 2-4941.) (For details see Cumberland.)

SOUTH WALES

IN-SITU CONCRETE, LTD., Victoria Works, Ebbw Vale (Tel. 3032) and Phoenix Works, Cardiff (Rhiwbina 2360) for limestone and slag aggregates, ready-mixed concrete, tarmacadam, media, filling, etc., Euros and

concrete, tarmacadam, media, filling, etc., Eures and pavings.

PENMAENMAWR AND WELSH GRANTIFE CO., LTD.,

IB Quay Street, Cardiff, Cfel. 20646(77) All Bizes and gradings of crushed granite aggregate from our Cardiff and Swanses Dock Deposts. Dolomite aggregate from One of the Cardiff and Swanses Dock Deposts. Dolomite aggregate in 1986/7.) Coated stame also available.

ESSIONS AND SONS, LTD., West Dock, Cardiff Producers of cuarus and fine aggregate, dredeed and graded to British Standards. Branches Newport and Swanses. (Also Gloucester and Hereford.)

SULTH WALES SAND AND GRAVEL CO., LTD. To Wales Co., LTD. Wales Co.,

STAFFORDSHIRE

BALLIDON QUARRIES, LTD., Ballidon, near Asbourse, Derbyshire, (Tel.: Parwich 201 and 202.)
Clean and graded dry limestone is B.S.S., all sizes, coated limestone to B.S. 802 and 1621 and wer-mix. large output, reliable deliveries
BARDON HILL QUARRIES (ELLIS AND EVERARD)
LTD., near Leicoster, (Tel.: Cosiville 1226/7/18: oc.
LTD., near Leicoster, (Tel.: Cosiville 1226/7/18: oc.
CRONDEN GRAVEL, LTD., Chendle, Stoke-on-Trem St. 1226/7/18: oc. 1226/7/18: oc.

DUNNING AND SON, LTD., Wood End Gravel Pits, Hednesford, Cfel.: Hednesford 302/325.) Washed sant and gravel. All to B.S.S. High-quality road-stone, concrete aggregates and coated macadam from our Hauphmond Quarry, near Shrewabury. (See Shropshire.) HAPER AND THOMAS, LTD., Bayston Hill Quarry Shrewabury. (See Shropshire for details.)

Shrewbury. (See Shropshire for details.)

HILTON GRAYEL, LTD., Cheadle, Staffs. (Tel. Tean 24.1.) Also at Longton, Stoke-on-Treat (Tel.: Longton 32196) and Stretton, Button-on-Treat (Tel.: Burton 6061) L. LTD., Cheadle, Stoke-on-Treat (Tel.: Burton 6061) C. LTD., Cheadle, Stoke-on-Treat (Tel.: Burton 6061) L. LTD., Cheadle, Stoke-on-Treat (Tel.: Burton 6062) All 199. And 2199. The Manchester Office: Hardy's Buildings, 3 Cateaton Street, Manchester, 3, Tel.: Blackfriars 2277/8.)

RUGELEY GRAYEL CO., LTD., Rugdey Ouarries, Rugeley Staffs. (Tel.: Rugdey 251/2.) Entitely modern plant. Sand classifiers. Finest sagrenates to 8.5.8. Large output.

CONTRACTORS' GUIDE TO AGGREGATES

STAFFORDSHIRE

STAFFORDSHIRE

SALISBURY AND WOOD, LTD., Matlock. (Tell 272/273.) (For details see Derbyshire.)

SHIRE OAK GRAVELS, LTD., Lichfield Road, Walsand Wood, Staffs. Washed crushed gravel and washed wood, Staffs. Washed crushed gravel and washed sand. (Tell: Brownhills 3253.)

TERN HILL SAND AND GRAVEL CO., LTD., Almington Quarries, near Market Drayton, Staffs. (Tell: Hales 261/2/3). Pili sand, concrete sand, all grades of washed crushed gravel. Hardcore.

FRENTHAM GRAVEL CU., LTD., Lordsley Quarries, Willoughbridge, near Market Drayton, Salop. (Tel. Pipe Gate 304/5.) All sizes crushed ar natural washed gravel. Twice washed sharp concreting sand. Plastering sand. Plant capacity 2,000 toms per day.

SUFFOLK

SUFFOLK

ALRESFORD SAND AND BALLAST CO., LTD., Alresford Creek, mear Colchester, Essez. (Tel., Wivenhoe 341.) Suffolk area pits at Bures and Stoke-by-Nayland. All strades wished supressive and Stoke-by-Nayland. All strades wished supressive and saleo howein.

BARDON HILL QUARRIES (ELLIS AND EVERARD). LTD., near Leicester. (Tel.: Coalville 1226/7/8; er London: Norwood Hill 15.) (For dets., see Leics.)

DANGERFIELD, F. J. AND C. LTD., 201A Finch., Eosd, London, N. W. J. Ctc., HAbpstead 804/8.)

DANGERFIELD, F. J. AND C. LTD., Pit at Chippenham. Cambs (See Cambs.)

PICKERSON, M., LID., Teversham Corner, Newmarks Road, Cambridge, (Tel.: Cam. 56973/4.) (See Cambs.)

ST. IVES SAND AND GRAVEL CO., LTD., 22 The Broadway, St. Ives, Hunts, (Tel.: St. Ives 2441/2/3/4.) (See Huntingdonshire for details.)

(See Huntingdonshire for details.)
THORPE GRAVEL PITS, LTD., Harvey Lane, Norwich.
(Tel.: Norwich 33243/4.) (See Norfolk.)
WEBS, G., CAMBRIDGE, 35 Magrath Avenua
Cambridge. (Tel. 3969/4353.) (See Cambs.)

SURREY

COFF, HARRY A., LTD., Buckhurst Hill, Cheapside Ascot, Berks. (Tel. 1026/7). (See Berkshire.)

COFF, HARRY A., LTD., Buckhurst Hill, Cheapside Ascot, Berks. (Tel. 1026/7). (See Berkshire.)

EASTWOOD SALES, LTD., Eastwood House, City Road, E.C.I. (Tel.: Clerkenwell 2040.) Longside Sand and Ballast Pit, Thorpe, near Esham. (Tel.: Beham 3121.) Producers and distributors of all grades of washed aggregates.

GILSON, S. C., AND SONS, LTD., Holcombe, near Bath. (Tel.: Stratton-on-the-Fosse 243.)

HALL AND CO., LTD., Vicer main depots all Coulsdon, Epsom, Mitcham, Oxted, Purley, Redhill, Tadworth and Woking. Pits at Send and Reigate. Gravel aggregates, concreting, plastering and building sand, Surcercte precision-mixed concrete.

HARRIS, M. P., AND CO., LTD., Kingston Road. Leatherbead, Surrey (Tel. 3497). (See Sussex.)

JANES AND CO., LTD., 2C Buckingham Avenue, Slough. Sand, aggregates, and build excavation. (Tel.: Slough 20361/2/3.)

LONDON BALLAST CO., LTD., 1621: Paddinator 3064.)

Slough. Sand, aggregates, hardcore, ashes, bulldozing and bulk excavation. (Tel.: Slough 2035;12/3.)

LONDON BALLAST CO., LTD. (Tel.: Paddington 5064.)
55A Porchester Terrace North, Paddington, W.2.

MARCO (AGGREGATES), LTD. Pit: Norlands Lane, Thorpe, masr Egham. (Tel.: Chertsey 3401.) Producers and distributors of high-grade washed sand, shingle, ballast, etc.

MARCO (CROYDON), LTD., Hampton Road, West Croydon. (Tel.: THOrnton Heath 4236/7/8.) All States aggregates, aggregates, aggregates, bardcore, ashes, cement. Clinker block manufacturers.

WILLS, A. L., AND SON, LTD., Builders' Merchants, Garlands Road, Leatherhead, (Tel.: 3018/9.)
Sand aggregates, bardcore, ashes, cement. Clinker block manufacturers.

WINTON, WM. R., LTD., Send, Woking, (Tel.: Ripley 2545/5). All grades sand, shingle, ballast, hoggin and ashes. Clinker block manufacturers.

AVANN, F., Cavendish Avenue, Eastbourne. (Tel.: 4969/70.) Washed and graded ballast, sand, bricks, breeze and concrete blocks, hardcore, clinker.

A999/10.) Wasined and graded ballast, sand, oricks. oriceze and concrete blocks, hardcore, clinker, oriceze and concrete blocks, hardcore, clinker, banderes and concrete blocks, hardcore, clinker, banderes and concern and

subset, etc.

WRIGHT, C., AND SONS (BTON), LTD., 19 Bristol
Garders, Brighton, 7. (Tel.: Brighton 63357 and
62-06.) All-in ballast, washed and crushed shingle,
sand, ashes, hardcore, chalk, bricks, etc.

WARWICKSHIRE

WARWILLSHIRE

TO COPER, J. T. Ballidon. near Ashbourne, Derbyshire. (Tel.: Parwich 201 and 202.)
Clean and graded dry limestone to B.S. S., all sizes,
coated limestone to B.S. 802 and 1621 and wet-mix;
large output: reliable deliveries. L.TD.. Olimorron,
the committee of the co

Shale, hardcore and clinker ash mi dug or graded. Delivered to site or loaded into customers' own vehicles by arrangement. St. LTD., New Duston, Northampton, Cfel: Brisworth 278 and 298; Duston 5.05. (See Northamptonshire.)
HALL AND CO., LTD., 183 Lichfield Road, Four Oaks, Sutton Coldried. (Tel.: Four Oaks 356.) Gravel agargasies, concreting, plastering and building sand. HARABIN. W. H., AND SONS, LTD., Navigation agargasies, concreting, plastering and building sand. HARABIN. W. H., AND SONS, LTD., Navigation agargasies, concreting, plastering and building sand. HARABIN. W. H., AND SONS, LTD., Navigation agargaves, sands, ashes, setts, etc.
JUDKINS, LTD., Grantie Ouarries, Tuttle Hill, Nunseaton (Tel.: Nunceaton 3411—10 lines.) All sizes washed granite aggressite. Larred and bituminous washed granite aggressite. Larred and bituminous washed granite aggressite. Larred and bituminous washed granite aggressite. Larred and Stuminous WELFORD GRAVELS. LTD. (See Redfordshire and Northamptonshire.)
YEOMANS, G. R., LTD., Oxford Road, Ryton-on-Dunsmore, near Coventry, (Tel.: Coventry, Tollbar 2376/7/8). Shale, hardcore—as dug and graded. Loaded into vehicles or delivered to site.

WESTMORLAND

BROOMBYS, LTD., Sandside, Milnthorpe, Westmor-land. (Tel.: Milnthorpe 3251/2.) All grades washing pitching tarmacedam immercore grante chippings, pitching tarmacedam (Co., LTD., Carlisle (Tel.: Carlisle 2-4941). For details, see Cumberlase.

AMEY'S AGGREGATES, L.TD., Lower Wootton, Ilnairs
Hill. Oxford. (Tel.: Oxford 35421—10 lines) Pits
at Dry Sandford, near Abingdon, Sutton Courtenay,
and the state of the state

WILTSHIRE

DANGERFIELD, F. J., AND CO., LTD., 251A Facing Road, London, N.W.3. (Tel.: HAMpstead 2844;) For all road assersairs, kerbs, setts. (See Losica, Gilson, S. C., AND SONS, LTD., Holcombe, near list (Tel.: Stratton-on-the-Fosse 243;) MOREYS (VERWOOD), LTD., Verwood, Wimbors, C. (Tel.: Verwood 234.) Concrete assersairs building sand, boggin, path gravel.

POLE (LECHLADE), LTD., Gravel Pit, Burford Road, Lechlade, Glos. (Tel.: Lechlade 219.) TAYMAC, LTD., WOOTON Bassett. (Tel.: 391—5 lists) Pits at Lecock (Tel.: 304.) Wilks; Fainten Pits and Lacock (Tel.: 304.) Wilks; Fainten Pits and Lacock (Tel.: 304.) Wilks; Fainten Pits and Lacock (Tel.: 304.) Wilks; Washed and stream building sand. Graded clinker media.

WORCESTERSHIRE

WORCESTERSHIRE

BALLIDON QUARRES, LTD., Ballidon, near an bourne, Derbyshire. (Tel.: Parwich 201 and 201. Clean and graded dry limestone to B.S. 802, and 1621 and weeker. Large output; reliable deliveries and 1621 and weeker. Leominster, Herefordshire. (Tel.: Kingaland 301/4). Leominster, Herefordshire. (Tel.: Kingaland 301/4). DINMORE GRAVEL. AND STONE CO., LTD., 5A Kingaland Leominster, Herefordshire. (Tel.: Hereford 5233.) Supplier, of all grades of concrete aggregates, sand, pitching stone and hardcore. DUNNING AND SON, LTD. (See Shropshire.) HARPER AND THOMAS, LTD., Bayston Hill Quarr. Shrewsbury. (See Shropshire of details.)

NASH ROCKS STONE AND LIME CO., LTD., Presteigne, Radnor, (Tel.: Presteigne 352.) (See Herefordshire for details.)

VIOLE SLUEDE

YORKSHIRE

BRAITHWAITE, A., AND CO., LTD., Conyngham Hal, Knarcesborough. (Tel.: Knarcesborough 2286.) Quarrie at Knarcesborough (Tel.: Knarces. 2286) and Catterio (Tel.: Old Catt. 157). Washed, crushed and grade concrete aggregates to B.S. Specification. Output 2,000 tons daily. Ready mixed motter and read mixed concrete also available.

Cele: Cito Cart. 157. Wasned, cruned and grade concrete aggregates to B.S. Specification. Output concrete also available.

BURROWS BROTHERS (EXCAVATIONS). LTD. Market Place Chambers, West Bars, Chesterfaid (Tel. 7130). (For details, see Derbyshire).

DENNIFF, ALAN S., LTD., Siveton Park, near Sheffair (Tel. 7130). (For details, see Derbyshire).

GEN QUARRIES, LTD., Kiveton Park, near Sheffair (Tel. Kiveton 446/7-8). Truck-mixed and pre-mixed concrete.

Wester of the Concretion of the Concretio

SUBSCRIPTION ORDER FORM

TO THE CONTRACT JOURNAL CO. LTD., 32 SOUTHWARK BRIDGE ROAD, LONDON, S.E.I

> Please forward "THE CONTRACT JOURNAL" each week for which I/we enclose £.....

SUBSCRIPTIONS

£5-4-0 per year, post free £2 - 12 - 0

half-yearly, post free Payable in Advance

(BLOCK LETTERS)

Full postal address —— (BLOCK LETTERS)

Occupation/Business(For Readership Classification Purposes Only)

THE INDEX TO DISPLAYED ADVERTISEMENTS WILL BE FOUND ON PAGE 708

King lien hing



No other plant in its size range can match the many years-ahead features of the Model 892 BatchOmatic. Write for literature.

Barber-Greene BatchOmatic offers automatic operation, high capacities

The many advantages of the Barber-Greene 2000-pound BatchOmatic allow it to produce higher capacities than ordinary batch plants of the same size.

Simultaneous measuring of all aggregates, including the mineral filler, cuts measuring to a fraction of the time normally required.

The human element is eliminated in measuring aggregate and asphalt. Measuring is through positive on-and-off flow.

The plant can be erected and put into operation faster and at less cost.

Dyna-Mix pugmill achieves thorough mixing, including uniform coating, in less time than any other pugmill made.

Operation is fully automatic. Simple, foolproof automatic controls are an integral part of the plant.

The plant can be instantly converted from automatic to manual operation, or from manual to automatic.

Weight of each ingredient or total aggregate can be checked on the scale at any time.

Other sizes available. Contact your Barber-Greene distributor for specifications.

Barber-Greene BatchOmatic plants are also available with 4,000 and 6,000 lbs. batch capacities

Write for literature on the world's most modern asphalt plants.

Barber-Greene

Distributors in the British Isles:

JACK OLDING & COMPANY LIMITED

HATFIELD . HERTFORDSHIRE

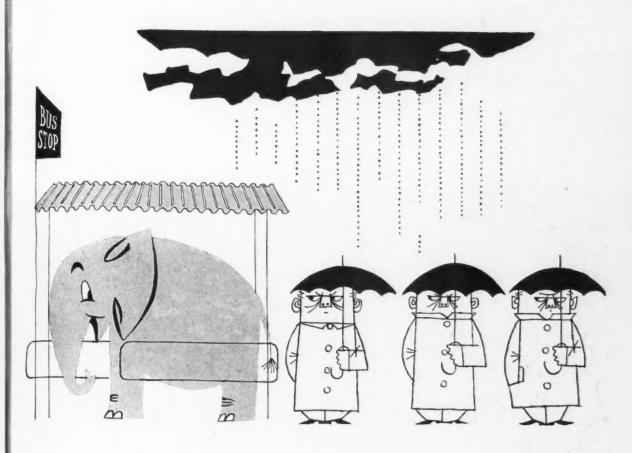
Reliability in a Big way!



Rugged strength to stand up to the roughest, toughest conditions . . . tread patterns scientifically designed for every sort of operation . . . built-in dependability to keep your machines always on the job: you can rely on DUNLOP Earthmover Tyres for the very greatest efficiency and economy. Whatever your machines or your operating conditions there are tyres in the DUNLOP range to do a really first-class job for you!

DUNLOP

TYRES
- built better to last longer!



... but for complete protective cover

JOHN SMITH

TARPAULINS-SHELTERS-COLLAPSIBLE LORRY TILTS

with immediate delivery







JOHN SMITH & CO. (LONDON) LTD.

Head Office & Works: Hainault Works, Chadwell Heath, Romford, Essex. Branch Office & Works: Lower Holmes Street, Cadoxton, Barry, Glam. Telephone: Barry 2372

Telephone: Seven Kings 6070 (6 lines)

A hungry pack of EUCLID TS-24 Twin-Power scrapers really surges into action.

The TS-24 has twin Cummins diesel engines, totalling 580 b.h.p. It can self-load most scraper materials—a one-man crew can handle loads of up to 32 cu. yds.

The TS-24 is the biggest profit-earner in the EUCLID range. Ask for a demonstration.



Subsidiary Companies Branches Works and Agencies throughout the World

